

ADA 084659

LEVEL <sup>III</sup>

AD-E 300 753



✓ DNA 4355T-3

## SOVIET INTERMEDIARY STRATEGIC C<sup>2</sup> ENTITIES—THE HISTORICAL EXPERIENCE

The BDM Corporation  
7915 Jones Branch Drive  
McLean, Virginia 22102

30 April 1979

Topical Report for Period 1 September 1978—30 April 1979

CONTRACT No. DNA 001-78-C-0077

APPROVED FOR PUBLIC RELEASE;  
DISTRIBUTION UNLIMITED.

THIS WORK SPONSORED BY THE DEFENSE NUCLEAR AGENCY  
UNDER RDT&E RMSS CODE B363078464 099QAXCA11202 H2590D.

Prepared for  
Director  
DEFENSE NUCLEAR AGENCY  
Washington, D. C. 20305

DTIC  
ELECTED  
MAY 27 1980  
S D  
D

FILE COPY

Destroy this report when it is no longer  
needed. Do not return to sender.

PLEASE NOTIFY THE DEFENSE NUCLEAR AGENCY,  
ATTN: STTI, WASHINGTON, D.C. 20305, IF  
YOUR ADDRESS IS INCORRECT, IF YOU WISH TO  
BE DELETED FROM THE DISTRIBUTION LIST, OR  
IF THE ADDRESSEE IS NO LONGER EMPLOYED BY  
YOUR ORGANIZATION.



## UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DNA 4355T-3 ✓	2. GOVT ACCESSION NO. AD-A084659	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) SOVIET INTERMEDIARY STRATEGIC C <sup>2</sup> ENTITIES— THE HISTORICAL EXPERIENCE	5. TYPE OF REPORT & PERIOD COVERED Topical Report for Period 1 Sep 78—30 Apr 79	
7. AUTHOR(s) Gregory C. Baird	6. PERFORMING ORG. REPORT NUMBER ✓ BDM/W-79-089-TR	
9. PERFORMING ORGANIZATION NAME AND ADDRESS The BDM Corporation ✓ 7915 Jones Branch Drive McLean, Virginia 22102	8. CONTRACT OR GRANT NUMBER(s) DNA 001-78-C-0077 ✓	
11. CONTROLLING OFFICE NAME AND ADDRESS Director Defense Nuclear Agency Washington, D.C. 20305	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS Subtask 099QAXCA112-02	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)	12. REPORT DATE 30 April 1979	
	13. NUMBER OF PAGES 118	
16. DISTRIBUTION STATEMENT (of this Report)	15. SECURITY CLASS (of this report) UNCLASSIFIED	
	15a. DECLASSIFICATION DOWNGRADING SCHEDULE	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES This work sponsored by the Defense Nuclear Agency under RDT&E RMSS Code B363078464 099QAXCA11202 H2590D.		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Strategic Command Control Command and Control Echelons Military History Military Geography	Soviet Union	
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Soviet strategic ground force disposition and employment is reflective of a set of geo-strategic concepts. Historically, strategic command and control of these deployed forces was highly centralized at the Moscow level with the General Staff functioning as the executive agent. For various reasons, the Soviets have employed a variety of intermediary control entities that interfaced between Moscow and the deployed front commands. This study presents		

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

20. ABSTRACT (Continued)

the Soviet WWII experience with these intermediary strategic C<sup>2</sup> entities. The current applicability of this historical experience is assessed.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

## PREFACE

The concept of Counter-Command, Control and Communications (C-C<sup>3</sup>) has recently received considerable interest within the U.S. defense community. C-C<sup>3</sup> is portrayed by its proponents as a cost effective means of increasing the effectiveness of allied forces in any NATO-Warsaw Pact conflict. Central to the entire concept is the requirement for an appreciation of how the opponent actually commands and controls and which echelons perform what functions during different phases of an operation. It is this appreciation which provides the knowledge required to determine what C<sup>3</sup> node to engage when.

From the theater commander's perspective the persuasiveness of C-C<sup>3</sup> has suffered due to an apparent Soviet lack of a comparable theater command node. Typical portrayals of Soviet C<sup>3</sup> depict the critical C<sup>2</sup> node as Moscow, a safehaven in a theater conflict, with no intermediary nodes between Moscow and the fronts. Effective C-C<sup>3</sup> is limited to the politically sensitive option of attacking Moscow in a theater conflict or attacking the fronts with their doctrinally redundant command posts.

Recent evidence from Soviet military literature indicates that this portrayal of Soviet C<sup>2</sup> of fronts may be inaccurate. This study utilizing the available Soviet histories and military literature provides additional insight into Soviet C<sup>2</sup> of fronts with particular focus on Soviet WW II experience with intermediate Moscow-front C<sup>2</sup> entities. These insights and study conclusions may impact significantly on allied C-C<sup>3</sup> options at a theater level.

Accession For	
NTIS GRA&I <input checked="" type="checkbox"/>	
DDC TAB <input type="checkbox"/>	
Unannounced <input type="checkbox"/>	
Justification _____	
By _____	
Distribution/	
Availability Codes	
Dist.	Avail and/or special
A	

DTIC  
ELECTE  
S MAY 27 1980 D  
D

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>
	Preface . . . . .	1
	List of Illustrations . . . . .	5
	List of Tables . . . . .	7
1	EXECUTIVE SUMMARY . . . . .	9
	1.1    Background. . . . .	9
	1.2    Historical Use of Intermediary C <sup>2</sup> Entities. . . . .	9
	1.3    Modern Applicability. . . . .	12
2	INTRODUCTION . . . . .	14
	2.1    Purpose . . . . .	14
	2.2    Approach . . . . .	15
	2.3    Scope . . . . .	16
3	SOVIET GEOMILITARY CONCEPTS . . . . .	18
	3.1    Introduction . . . . .	18
	3.2    Theater of Military Operations . . . . .	18
	3.3    Strategic Sector/Axis . . . . .	30
	3.4    Operational Sector . . . . .	32
	3.5    Theater of War . . . . .	33
4	STRATEGIC COMMAND AND CONTROL OF FRONTS . . . . .	40
	4.1    Introduction . . . . .	40
	4.2    Front . . . . .	40
	4.3    Supreme High Command/General Staff . . . . .	42
	4.4    Intermediary Command and Control Entities . . . . .	52
5	MODERN STRATEGIC COMMAND AND CONTROL . . . . .	86
	5.1    Introduction . . . . .	86
	5.2    The Geo-Strategic Constructs . . . . .	86
	5.3    Modern Strategic Command and Control . . . . .	87
	5.4    Detection of the High Command . . . . .	96
	5.5    Conclusion . . . . .	97

TABLE OF CONTENTS (CONTINUED)

<u>Appendix</u>		<u>Page</u>
A	DESCRIPTION OF A THEATER OF MILITARY OPERATIONS . . .	101
B	BIBLIOGRAPHY . . . . .	107

## LIST OF ILLUSTRATIONS

<u>Figure</u>		<u>Page</u>
3.1	Hierarchy of Soviet geo-military terms . . . . .	19
3.2	Regions of Russian strategic concern . . . . .	26
3.3	NATO's Central European theater of operations .	29
3.4	Operational sectors of a strategic operation within a strategic sector . . . . .	34
4.1	Strategic C <sup>2</sup> scheme - June 1941 . . . . .	43
4.2	Strategic C <sup>2</sup> communications - 24 June 1941 . .	44
4.3	Strategic C <sup>2</sup> of Southwestern Strategic Sector - September 1941 . . . . .	48
4.4	Western view of Soviet WWII strategic C <sup>2</sup> . . .	53
4.5	Soviet view of soviet WWII strategic C <sup>2</sup> . . . .	54
4.6	C <sup>2</sup> of NATO's Central European TVD - the Soviet view . . . . .	58
4.7	Ground forces strategic C <sup>2</sup> schematic for the Southwestern Sector - July 1941 . . . . .	60
4.8	Ground forces strategic C <sup>2</sup> schematic for the Southwestern Sector - August 1941 . . . . .	63
4.9	Organization of the high command of Soviet Far Eastern Forces . . . . .	67
4.10	The plan for the Manchurian Campaign . . . . .	69
4.11	Assignment of Stavka representatives prior to the Battle of Kursk . . . . .	74
4.12	Strategic C <sup>2</sup> of Northwestern and Western Strategic Sectors - 29 July 1944 . . . . .	77

LIST OF ILLUSTRATIONS (CONTINUED)

<u>Figure</u>		<u>Page</u>
5.1	Possible present Western theater of operations .	88
5.2	Possible present strategic sector in Western TVD . . . . .	89
5.3	Possible current Soviet strategic C <sup>2</sup> scheme . .	94

## LIST OF TABLES

<u>Table</u>		<u>Page</u>
3.1	The TVD as the basic geo-military division . . .	20
3.2	Definition of theater of military operations . .	21
3.3	Russian/Soviet conflicts by region . . . . .	27
3.4	Definition of strategic sector . . . . .	31
3.5	Theater of war . . . . . . . . . . . . . . .	35

SECTION 1  
EXECUTIVE SUMMARY

1.1 BACKGROUND

"Soviet Intermediary Strategic C<sup>2</sup> Entities" was completed under contract with the Defense Nuclear Agency as part of that Agency's Integrated Nuclear Communications Assessment (INCA) Program. The purpose of the Soviet studies undertaken by the INCA program is to identify exploitable vulnerabilities in the Soviet C<sup>3</sup> system and particularly in nuclear-related C<sup>3</sup>. This study analyzes the Soviet historical use of intermediary entities between the deployed Fronts and Moscow during World War II.

Previous research into Soviet "theater" equivalent C<sup>2</sup> entities has suffered from a paucity of data. Prior to 1975, the thirtieth anniversary of the victory in WW II, little relevant material was published. Since 1975 there has been a small but continuing number of articles dealing with the problems of strategic command and control. These articles indicate a resurgence of interest within the Soviet military concerning the subject. Based on this material, it is now possible to assess the current relevance of the Soviet WW II experience with strategic C<sup>2</sup> as seen through Soviet eyes.

1.2 HISTORICAL USE OF INTERMEDIARY C<sup>2</sup> ENTITIES

Throughout World War II the Soviets employed intermediary C<sup>2</sup> echelons between Moscow and the Fronts. Two types of intermediary entities were used -- the high command (GLAVNOKOMANDOVANIE) and the Representative of the Supreme High Command. The primary missions of these entities were coordination and direction of multi-Front/service operations.

1.2.1 The High Command. The high command was a formal command echelon headed by a CINC (GLAVNOKOMANDUYUSHCHIJ) with a staff. All branches of the services (air force, navy, and army) operating within the high command's area of operation were subordinated to it. Generally, each high command had command of three Fronts. The combat arms (artillery and armor) and the Air Force and Navy were each represented on the high command by a CINC.

High commands were used during the strategic defensive period (1941-1942) and the Manchurian Campaign (August 1945). The high commands of 1941-1942 are assessed by modern Soviet military commentators as only marginally successful. They were severely constrained by Moscow in their authority to direct Front operations and were frequently bypassed by both the Front commands and the Supreme High Command. Lastly these early high commands had neither the proper staffs nor materiel and personnel resources to play any significant role in influencing the course of battle.

The "High Command of Soviet Forces in the Far East" is the model of a successful high command. Due to the remoteness of the theater of operations and the paucity of communications from the theater to Moscow, the Soviets were forced to create a near autonomous command to direct the Manchurian Campaign. The operational plan developed by the General Staff required converging attacks by three Fronts. This in turn necessitated a powerful on-site C<sup>2</sup> entity to provide the necessary direction to insure coordination between the three Fronts, three air armies, one fleet and two flotillas involved. This high command directed a campaign which in twelve days achieved ground advances of 600-800 km, airborne operations and amphibious operations in North Korea, Sakhalin Island and the Kuriles.

Based on the available historical data, the following conclusions regarding the high command are suggested:

- The high command provides a strategic C<sup>2</sup> option for situations which preclude complete centralized Moscow control.
- The high command is the largest Soviet span of control entity and is responsible for multi-service coordination and direction of the execution of strategic operations.
- All forces involved in a strategic operation are subordinated to the high command.
- The high command is not a strategic planning entity.

1.2.2 The Stavka Representative. The most frequently used form of intermediary C<sup>2</sup> entity during World War II was the Stavka Representative or Representative of the GHQ of the Supreme High Command. The Stavka Representative was an extra legal institution primarily responsible for providing planning assistance to the Fronts, insuring cooperation between Fronts/services and monitoring the execution of Supreme High Command directives. Stavka Representatives were used ad hoc throughout the war and normally only for the most important operations.

The Stavka Representatives normally were sent to the Fronts as an operations group under the senior Representative. These groups, including high ranking representatives of combat and technical services, provided valuable assistance to the Fronts in preparing for an operation. Their ability to communicate directly to the Supreme High Command, bypassing the hierarchies of the General Staff and Commissariat of Defense, often enabled the early resolution of Front logistic, personnel or operational difficulties.

The extra-legal status of the Stavka Representative led to abuses. Although no statutory basis for their authority existed, Stalin held them culpable for failures by the Fronts. This often led to the Representative becoming more a director than an advisor.

Marshal Zhukov, the most famous of the Representatives, frequently usurped the authority of Front commanders and staffs. However, Zhukov's military record was so successful that few detrimental effects resulted from his actions. Others, such as the political figure Meklis, contributed to major defeats. As a result of these abuses the Stavka Representatives were not well received by the Front and Army commanders.

### 1.3 MODERN APPLICABILITY

The current Soviet assessment of the WWII use of intermediary C<sup>2</sup> entities indicates that such entities have a modern applicability. Soviet military literature suggests an increased interest in strategic C<sup>2</sup> beginning in 1975 and continuing to date. The subject of intermediary entities has received increasing attention during this period. A number of positive statements concerning the necessity of intermediary entities in modern conflict can be found in these articles. One recent article categorically stated that strategic C<sup>2</sup> was "practically impossible" without intermediary entities.\*

The high command, of the two types of intermediary entities, is assessed as most applicable to modern combat. This assessment is driven by two considerations: the potential for abuses inherent in the Stavka Representatives, and the need for a formal, powerful entity to provide on-site direction of multi-Front/service operations. The Soviets consistently stress in their literature the need for an intermediary entity when the military situation is subject to rapid changes and communications and coordination subject to

---

\*I. Vydrov, "Strategic and Operational Art: On the Leadership of Military Operations of Strategic Troop Groupings in World War II," VOENNO-ISTORICHESKJ SHURNAL, No. 4 (1979), trans. JPRS, in TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1446 (13 June 1979), page 24.

disruption. The high command with formal powers appears better suited to these characteristics of nuclear warfare than the Stavka Representative.

A high command may be formed to direct operations in the Central Region. There is some evidence that suggests a high command will be employed in the Soviet Western theater of operations which encompasses the Central Region. This evidence includes indications that the General Staff's Operations Directorate is organized according to theaters of operations. Historically this required a deployed span of control command to direct operations within strategically important theaters. Also two Soviet generals in the Forward Area, Marshal Kulikov (CINC, Warsaw Pact) Army General Ivanovskiy (CINC, GSFG), hold the formal title of CINC (GLAVONOKOMANDUYUSHCHIJ or GLAVKOM). A GLAVKOM would head the high command if one is formed.

While this evidence is not conclusive, it suggests that Soviet planners conclude that in modern combat an intermediary "theater" command is an operational necessity. This requirement is apparently linked predominately to the criticality of the operation. Thus a high command may be employed even in the communications rich environment of Eastern Europe. Further the constant stress on the "autonomous" nature of and the "great powers" vested in the high command of 1945 indicates that any contemporary high command would have considerable authority and responsibilities. It is thus extremely important that a research effort be conducted to determine if a modern high command does exist or is exercised. An assessment then should be accomplished to determine the high command's criticality to the Soviet theater campaign and its physical and functional vulnerabilities. The possibility exists that the Soviets may have created a uniquely vulnerable C3 node outside the Soviet Union.

## SECTION 2

### INTRODUCTION

#### 2.1 PURPOSE.

"In spite of radical changes in military matters, which have taken place in the post-war period, not one question in the area of armed combat can be completely studied and mastered without a deep knowledge of the experience of World War II."

- Col V. Samoylenko 1/

This study presents an analysis of Soviet geo-strategic concepts and their historical experience in intermediary Moscow-front command and control (C<sup>2</sup>) entities with an assessment of the modern applicability of both. The study was originally undertaken to analyze the concept, function and importance of the teatr voennyykh dejstvij (theater of military operations) in Soviet strategy. The basis for the study was a presumption that the theater of military operations (TVD) was linked to a "theater command." Preliminary research forced two conclusions -- the basic presumption of a TVD-theater command linkage was erroneous and, consequently, the scope of the study must be broadened to include both Soviet geo-strategic concepts and forms of strategic ground C<sup>2</sup>.

Conversations with knowledgeable government analysts resulted in further redefinition of the study's subjects. These conversations highlighted a need for a study that both clarified terminology and demonstrated the historical Soviet experience in Soviet strategic command and control. This study, capitalizing on the Soviet perceived relevancy of their World War II experience, quoted above, contributes an unclassified primer on the subjects of Soviet geo-strategic concepts and strategic command and control.

## 2.2 APPROACH.

"In order to establish the strategic thought and doctrine of an alien military culture, it is first necessary to escape the confines of one's own implicit and unconscious strategic concept." - Raymond L. Garthoff 2/

One of the failings endemic to many studies of Soviet military is mirror imaging. The causes are myriad. One manifestation of mirror imaging frequently encountered in the course of this study stemmed from the commonality of terms. For example, such translated Soviet terms as operational art and tactical art apparently cause little bewilderment to most U. S. military officers. Yet these terms are much more precise in Soviet usage than U. S. Operational art applies to formations such as fronts and armies while tactical art is relegated to units (Soviet divisions and below). The term "strategic" also has fundamental disparities of meaning between U. S. and Soviet usage. Thus Soviet terms that translate into familiar English terms should not be presumed to have identical meanings or nuances.

To preclude, to the degree possible, inadvertent mirror imaging, this study relies almost exclusively upon Soviet sources. Extensive use of quotations was made with textual analysis to present in Soviet words their own evaluations, concepts and uses of the terms and concepts analyzed. These quotations, obscure facts, and possible contentious statements are documented in the notes that accompany each chapter. The bibliography provided will guide the interested reader to the translated literature available.

Non-Soviet material was used sparingly in this study. John Erickson's "The Road to Stalingrad" and Alexander Werth's "Russia at War" were the primary supplements to the Soviet material. Erickson's work was particularly useful for information on Soviet

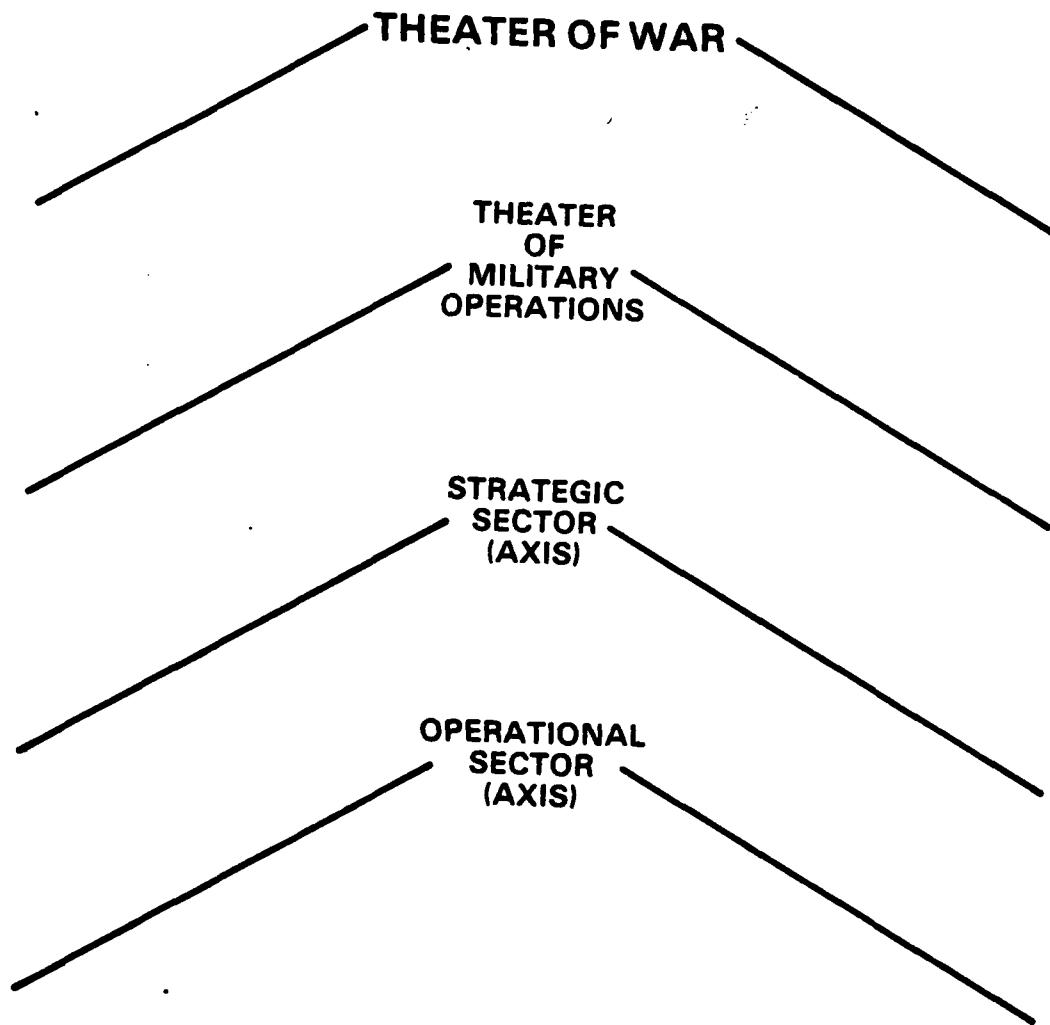
prewar planning and the high commands of 1941-1942. Other non-Soviet sources listed in the bibliography were used only for minor data required to illustrate certain trends and meanings.

#### 2.3 SCOPE.

Section 3 presents the basic Soviet geo-strategic concepts. Specifically the theater of war, theater of military operations, strategic sector and operational sector are analyzed and discussed. The section treats the theater of military operations in depth.

Section 4 presents an outline of Soviet World War II strategic command and control ( $C^2$ ). While strategic  $C^2$  was highly centralized throughout WW II, the Soviets could not and did not control front operations without intermediary strategic entities. The chapter discusses the functions of the high commands and the representative of the Supreme High Command. As will be shown these entities provided a critical interface between the fronts and Moscow.

Section 5 provides an overview of the applicability, based on current Soviet writings, of these geo-strategic concepts and intermediate strategic echelons to the modern nuclear battlefield. Several alternative  $C^2$  schemes are offered based on Soviet WW II experience and current literature.



57368/79W

Figure 3.1. Hierarchy of Soviet geo-military terms

Table 3.1. The TVD as the basic geo-military division.

THEATER OF WAR

"USUALLY INCLUDES SEVERAL THEATERS OF OPERATIONS"

STRATEGIC SECTOR

"WITHIN THE LIMITS OF A PARTICULAR THEATER OF OPERATIONS"

OPERATION SECTOR

"PART OF A STRATEGIC SECTOR AND OF A THEATER OF OPERATIONS"

Source: Dictionary of Basic Military Terms

Table 3.2. Definition of theater of military operations.

## **THEATER OF MILITARY OPERATIONS**

A PARTICULAR TERRITORY, TOGETHER WITH THE ASSOCIATED AIR SPACE AND SEA AREAS, INCLUDING ISLANDS (ARCHIPELAGOS), WITHIN WHOSE LIMITS A KNOWN PART OF THE ARMED FORCES OF THE COUNTRY (OR COALITION) OPERATES IN WARTIME, ENGAGED IN STRATEGIC MISSIONS WHICH ENSUE FROM THE WAR PLAN. A THEATER OF OPERATIONS MAY BE GROUND, MARITIME, OR INTERCONTINENTAL. ACCORDING TO THEIR MILITARY-POLITICAL AND ECONOMIC IMPORTANCE, THEATERS OF OPERATIONS ARE CLASSIFIED AS MAIN OR SECONDARY.

SOURCE: DICTIONARY OF BASIC MILITARY TERMS

which "a known part of the armed forces" engage "in strategic missions."<sup>2/</sup> Fundamentally these are elaborations of a simpler TVD definition given in a common Russian dictionary: "that place where military operations will be carried out."<sup>3/</sup> The TVD is simply the strategic place de guerre.

Of importance, these definitions contain no inference to command of forces within a TVD. The TVD then should not be presumed to equate to the U.S. conception of "theater":

The geographical area outside continental United States for which a commander of a unified or specified command has been assigned military responsibility.<sup>4/</sup>

In U.S. concepts, "theater" has become inextricably entwined with "theater command." We have difficulty visualizing a theater as simply a functional or descriptive aggregate of the area responsibilities of equal commands or simply an area having some military significance. The Soviets, however, do recognize the distinction between an area and the command of forces in that area.

Soviet translations of TVD into English also indicate that conceptually the TVD is not linked to command and control. The western military equivalent of TVD, to the Soviets, is "theater of operations." Both "A FREQUENCY DICTIONARY OF RUSSIAN-ENGLISH MILITARY TERMS" and the "RUSSIAN-ENGLISH NAVAL DICTIONARY" give "theater of operations" as the equivalent for TVD.<sup>5/</sup> A "theater of operations" in contrast to a "theater" is defined in English as only an area; it is not explicitly coupled with an area command.<sup>6/</sup> The literal translation, in contrast, and seen in many non-Soviet translations, is "theater of military operations."

Although often used in an ambiguous context, TVD can be freely exchanged with theater of operations. For example, volume four of the Soviet "HISTORY OF WORLD WAR II 1939-1945" contains the

following conclusions concerning Allied operations in the Atlantic during the period June 1941 to April 1942:

[T]he battle in the Atlantic was of a stubborn nature. Meanwhile, not one of the sides succeeded in achieving results which would have fundamentally changed the situation in this theater of military operations. The allied powers could not reliably protect their routes, while Germany proved incapable of paralyzing them. In order to correct its position in the Atlantic, the allied command had to expend much more effort and time.<sup>7/</sup>

Clearly from the context above, the Atlantic TVD was an area common to both belligerents within which opposing forces engaged in combat.

Similarly, Marshal of the Soviet Union Vasilevskiy, commander of the Soviet Manchurian Campaign, wrote:

The concept of the plan of this operation [in the Far East] which was very large in scope was determined with consideration of the nature of the theater of the forthcoming military operations. The war was to take place on a territory with an area of around 1,500,000 square kilometers and a depth of 300-800 kilometers, as well as the water area of the Sea of Japan and the Sea of Okhotsk [emphasis added].<sup>8/</sup>

Obviously what is being described is, to paraphrase, "the territory on which the war was to take place" rather than command and control.

In summary, the TVD should be understood as a large strategically important area in which, during war, sizeable forces will be engaged in military operations. The term itself carries no C<sup>2</sup> implications; rather it is strictly geographic.

### 3.2.2 The Geo-strategic Determinant.

The "theater of military operations" is neither a new nor distinctly Soviet concept. Marshal Sokolovskiy, for example, in

"SOVIET MILITARY STRATEGY" cites Machiavelli's "ON THE ART OF WAR" as containing the TVD concept.<sup>9/</sup> Col Savkin, in "THE BASIC PRINCIPLES OF OPERATIONAL ART AND TACTICS", observes that "a dispersal of forces in the theater of military operations" was a manifestation of "the cordon and linear tactics dominant in the 18th century."<sup>10/</sup> In their review of a military history, Maj. Gen. Zhilin and Col. Egorov note that the increase in size of the TVDs in the 19th century was one of several "fundamental changes" to warfare.<sup>11/</sup> To Soviet military authors the TVD or equivalent has been around since at least the 16th century and certainly is not unique solely to Russian or Soviet military history.

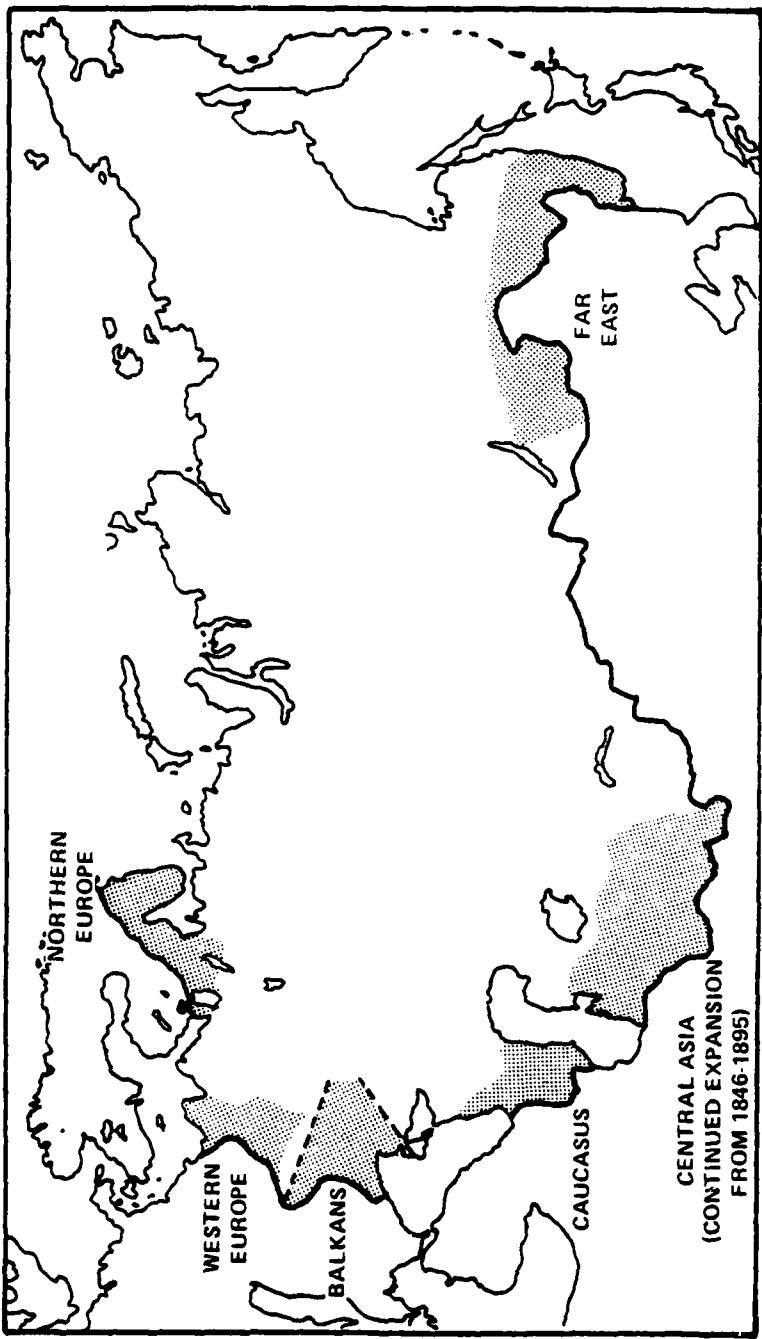
Although military geography has been a continual concern to all nations, it is particularly critical to the Soviets. Admiral Andreev in his article "The Subdivision and Classification of Theaters of Military Operations" suggested four "basic features which define a theater of military operations.<sup>12/</sup> Of these, the first was the "necessity of accomplishing strategic missions in certain regions."<sup>13/</sup> It is this geo-strategic requirement that explains the importance of the TVD in Soviet strategy.

The Soviet Union, with the longest borders in the world, must address strategic defense selectively. Uniform strategic defense is an obvious impossibility. Nor is uniform defense a geopolitical requirement. Much of the USSR borders Arctic waters and many other border areas, particularly in mid-Asia, are virtually unpopulated mountain ranges or deserts. Even subtracting these areas, the Soviets would still face a tremendously complicated defense problem. Some geo-strategic division -- the TVD -- is a management requirement to allow defense planning in a rational manner.

Both offensively and defensively, Russian historic strategic concerns have been geographically divided. Figure 3.2 illustrates those border areas in which the Russian Empire and the Soviet Union have engaged military forces or faced a military threat from the 19th century through the Korean Conflict. Table 3.3 lists these wars, conflicts or threats. This figure also illustrates one region, Central Asia, wherein Russian expansion was considerable but without serious opposition. Of particular import, these areas historically were not strategically equivalent. All of Russia's major strategic threats have come from Western Europe -- War of 1812 (capture of Moscow), WW I (loss of 1,300,000 square miles of territory 14/) and WW II (the near loss of Moscow and temporary loss of most of the European and Balkan territories). This national historical experience is unlikely to be ignored by the present Soviet leaders.

Equally relevant are those areas in which Russia has historically focused its expansionist/imperialist drives -- the Balkans, the Caucasuses and Central Asia. As Table 3.3 displayed, Russian interest and expansion in the Balkans and Caucasus have resulted in numerous conflicts. Conversely, her expansion in Central Asia, particularly from 1846 to 1895, was not marked by major wars due to the absence of major opposing powers. Only in the case of Iran and Afghanistan did Russian expansion meet significant resistance, from England, in modern times.

These observations are not meant to reduce present Soviet strategic concerns to the result of mere historical determinism. However, there is a striking continuum from the pre-Soviet period to today in the regionalization of strategic concerns. The Soviet Union inherited from history, rather than invented, the necessity to



5736B/79W

Figure 3.2. Regions of Russian strategic concern.

Table 3.3. Russian/Soviet conflicts by region.

NORTHERN EUROPE	WESTERN EUROPE	BALKANS	CAUCASUS	FAR EAST	
				RUSSO-TURKISH WAR (1805-1812)	RUSSO-PERSIAN WAR (1804-1813)
RUSSO-SWEDISH WAR (1808-1809)	WAR OF 1812	RUSSO-TURKISH WAR (1805-1812)	RUSSO-PERSIAN WAR (1804-1813)	RUSSO-JAPANESE WAR (1894-1905)	RUSSO-JAPANESE WAR (1894-1905)
ALLIED INTERVENTION (1918-1920)	WORLD WAR I (1914-1918)	RUSSO-TURKISH WAR (1828-1829)	RUSSO-TURKISH WAR (1806-1812)	ALLIED INTERVENTION (1918-1920)	ALLIED INTERVENTION (1918-1920)
RUSSO-FINNISH WAR (1939-1940)	SOVIET-POLISH WAR (1920)	CRIMEAN WAR (1854-1856)	RUSSO-PERSIAN WAR (1826-1828)	RUSSO-JAPANESE BORDER CONFLICT (1938-1939)	RUSSO-JAPANESE BORDER CONFLICT (1938-1939)
WORLD WAR II (1941-1945)	PARTITION OF POLAND (1939)	RUSSO-TURKISH WAR (1877-1878)	RUSSO-TURKISH WAR (1828-1829)	WORLD WAR II (1941-1945)	WORLD WAR II (1941-1945)
	WORLD WAR II (1941-1945)	WORLD WAR I (1914-1918)	CRIMEAN WAR (1854-1856)	KOREAN CONFLICT (1950-1953)	KOREAN CONFLICT (1950-1953)
		WORLD WAR II (1941-1945)	RUSSO-TURKISH WAR (1877-1878)	WORLD WAR I (1914-1918)	WORLD WAR I (1914-1918)
				WORLD WAR II (1941-1945)	WORLD WAR II (1941-1945)

accomplish regional strategic missions. It is a dictate of geography and this geographic determinism has resulted in the TVD. While these regions may not constitute individual TVDs, all TVDs are almost certainly within these areas based on both history and geography.

Such geo-strategic determinism is not, of course, limited to the Soviet Union. The identical "necessity of accomplishing strategic missions in certain regions" has resulted in the creation within the "Zone of the NATO Supreme Command in Europe" 15/ of three TVDs: the North European, Central European, and South European. The Soviet description of NATO's Central European TVD follows:

The Central European theater of operations includes the territory and coastal waters of the FRG (except the State of Schleswig-Holstein), Belgium, the Netherlands, and Luxembourg [Figure 3-3], and is most important in terms of its military-strategic position, the composition of the armed forces deployed within it, and the operational equipment of the territory. Two army groups and two combined tactical air commands, consisting of 23 divisions and approximately 2,500 combat aircraft, respectively, are deployed in this theater.16/

Geography does not merely determine the basic boundaries of the TVDs but also influences the size, composition and planned operations of the forces within the TVD. Although the constraints of geography upon military operations have been somewhat ameliorated by the capabilities of modern aircraft and missiles, they remain an important consideration for the employment of armored and mechanized forces. Major General Bronevskiy, in a 1963 article, wrote:

The theaters of combat are not simple receptacles for the armed forces; the spatial and temporal characteristics will seriously affect the organization of forces and the completion of military problems by them. The armed forces



5736B/79W

ADAPTED FROM CONGRESSIONAL BUDGET OFFICE,  
"U.S. AIR AND GROUND CONVENTIONAL FORCES FOR  
NATO: OVERVIEW." JANUARY 1978.

Figure 3.3. NATO's Central European theater of operations.

should not prepare for war in general, but for war in probable theaters, the varied characteristics of which must be taken into account in the planning and preparation of actions on any scale.<sup>17/</sup>

### 3.2.3 Conclusion.

The TVD is the basic geo-strategic division within Soviet military strategy. It allows the Soviets to address military requirements and missions (force levels and disposition, logistics and transportation, and military threats or opportunities) in functionally discrete geographical blocks. They are, in peacetime, the projected arenas of conflict and, in war, the actual battle areas. As such, the peculiarities of an individual TVD have a direct impact on the composition, disposition and missions of Soviet military forces within it.

### 3.3 STRATEGIC SECTOR/AXIS.

The strategic sector (strategicheskoe napravlenie<sup>\*</sup>) is second in importance only to the TVD of the Soviet geo-military terms. According to the General Staff Academy's definition, <sup>18/</sup> Table 3.4, the strategic sector is that part of a TVD which provides the avenue to the strategic political and economic centers of the enemy. It is a subdivision of a TVD within which is focused strategically important military actions. During the Great Patriotic War, the strategic sectors were the basic divisions of the western TVD (the Soviet-German front) within which the strategic defense of the Soviet Union was conducted. Prewar Soviet plans for strategic defense were based on three strategic sectors -- Northwest, Western

---

\* Napravlenie is a multifarious term which defies standardized translation. Depending on the context it may mean direction, axis or sector. A form of the word also has command and control applications in that it can mean the direction of an action. A derivative, napravlenets, translates as "director."

Table 3.4. Definition of strategic sector.

## **STRATEGIC SECTOR**

A WIDE STRIP OF LAND OR SEA, AND THE AIR SPACE ABOVE IT, WITHIN THE LIMITS OF A PARTICULAR THEATER OF OPERATIONS, LEADING THE ARMED FORCES OF ONE WARRING PARTY TO THE OTHER'S MOST IMPORTANT ADMINISTRATIVE-POLITICAL AND INDUSTRIAL-ECONOMIC CENTERS, THE STRUGGLE FOR WHICH MAY BE THE CONTENT OF A STRATEGIC OPERATION. BECAUSE OF ITS GEOGRAPHIC AND ECONOMIC CONDITIONS, A STRATEGIC SECTOR [AXIS] USUALLY PERMITS COORDINATED MILITARY ACTIVITIES TO BE CONDUCTED BY MANY STRATEGIC FORMATIONS OF VARIOUS SERVICES. AS A RULE, THERE ARE SEVERAL OPERATIONAL SECTORS [AXIS] WITHIN A STRATEGIC SECTOR [AXIS].

SOURCE: DICTIONARY OF BASIC MILITARY TERMS

and Southwestern -- for the defense of Leningrad, Moscow and Kiev respectively.<sup>19/</sup> They remained the principal geographic division for strategic planning C<sup>2</sup> throughout the war.<sup>20/</sup>

Although the strategic sector is formally the lowest of the strategic geo-military terms, TVD is frequently substituted for it. In an excellent 1975 article on wartime strategic leadership, V.P. Morozov mentions the "three main [high] commands in the strategic theaters of operation -- the Northwest, the West and the Southwest...."<sup>21/</sup> Even Marshal Zhukov made the same semantical substitution after the 1941 Moscow counteroffensive:

We must go on with the offensive in the western theatre of operations.... As for the Leningrad and southwestern offensive operations, I must say that our troops are up against strong enemy defences....I'm for strengthening the western theatre and stepping up the offensive there.<sup>22/</sup>

The formal distinction between the TVD and strategic sector appears to lie in the fact that forces in the sectors are not operationally independent. For example, during the period 1941-1944 the Soviet-German front was one continuous line from the Baltic to the Black Seas. Even though divided into three strategic directions, operations were to a great extent interdependent. In contrast, operations within a TVD are basically independent of operations in other TVDs since they are geographically discrete.

This distinction would also explain the informal colloquial usage of these terms. If the overall Soviet-German front is the context, then sector is used to differentiate strategic areas. However, if the context is operations within a particular strategic sector then TVD could be substituted for strategic sector.

### 3.4 OPERATIONAL SECTOR.

The operational sector, operatsionnoe napravlenie, is:  
A zone of terrain, or of water or air space, and

sometimes a combination of these, leading to the objectives of operational activities, namely, to groupings of the enemy or to his important economic centers, and permitting combat operations of major field forces to be conducted within its boundaries. An operational sector, being part of a strategic sector and of a theater of operations, alters with a change in the position of the grouping of enemy opposing forces, or with a change in the goals of the operation, and is always determined by the specific operational-strategic situation in the theater of operations.23/

By definition the operational sector is not a fixed, delimited area. Its boundaries are changed relative to geography and enemy disposition.

The operational sector is basically the arena for army and front operations. In an offense, an army's operational sector is its zone of advance. Figure 3.4 portrays the operational axes of a strategic operation variant according to postwar Soviet strategy.24/

### 3.5 THEATER OF WAR.

A "theater of war" (TV) denotes the largest unit of the basic Soviet geo-military concepts. By definition 24/ (Table 3.5) it is continental and includes one or more theaters of operations.25/ There is evidence, however, that the theater of war has little real geo-strategic meaning to the Soviets.

First, the term is not frequently used in Soviet military literature. For example, "A FREQUENCY DICTIONARY OF RUSSIAN-ENGLISH TERMS" omitted the term completely in its ranking of 2,507 military terms.26/ Similarly, the General Staff Academy's "DICTIONARY OF BASIC MILITARY TERMS", in its definition of TV, included an example, "the European theater of war," to clarify the meaning.27/ When compared with the frequency of usage of TVD, these facts suggest a certain irrelevancy of the TV to Soviet strategic dictates.

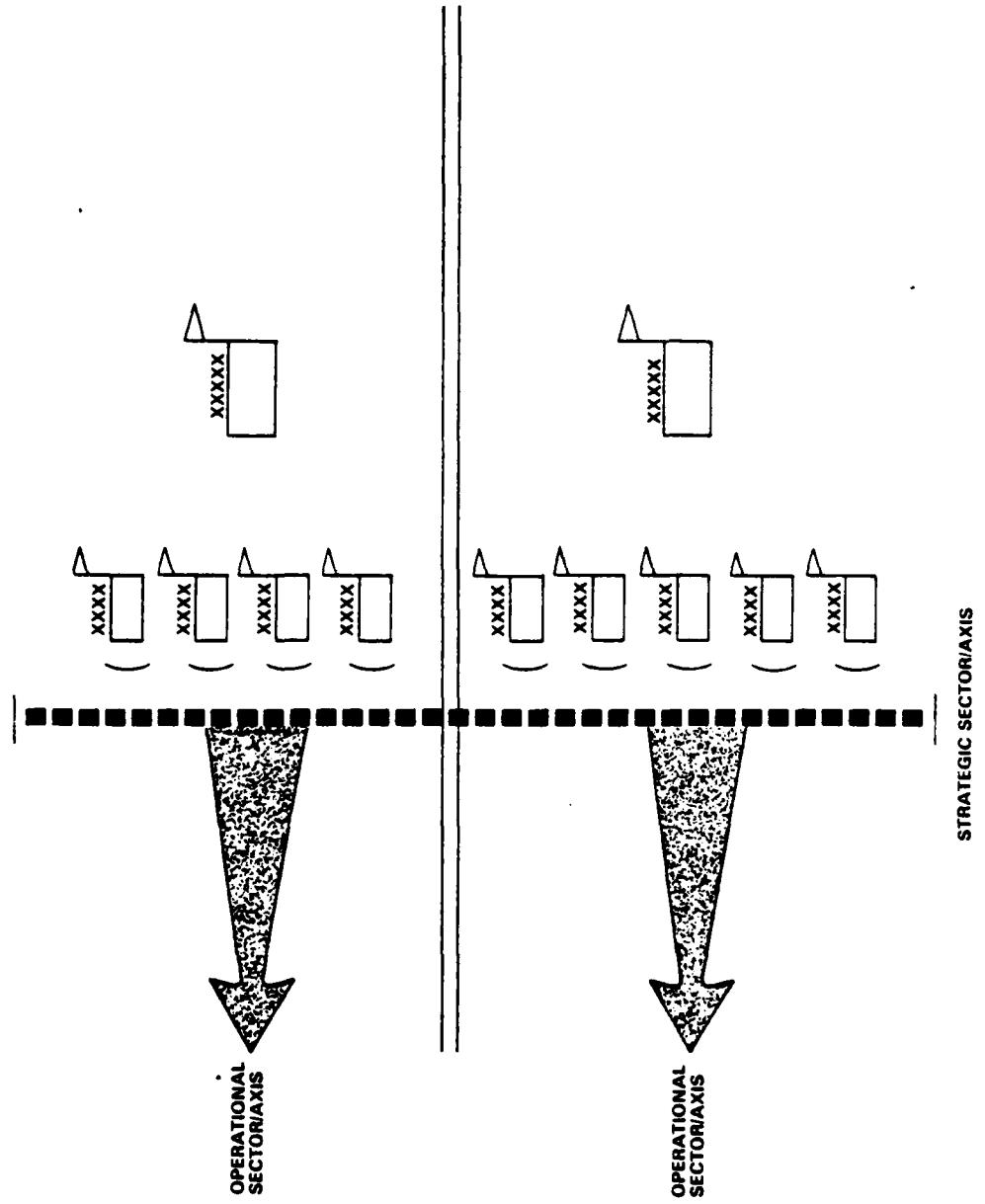


Figure 3.4. Operational sectors of a strategic operation within a strategic sector.

Table 3.5. Theater of war.

**TEATR VOJNY**  
**(THEATER OF WAR)**

**THE TERRITORY OF ANY ONE CONTINENT, TOGETHER WITH THE SEA AREAS ADJOINING IT AND THE AIR SPACE ABOVE IT, ON WHICH HOSTILITIES MAY DEVELOP (FOR EXAMPLE, THE EUROPEAN THEATER OF WAR). A THEATER OF WAR USUALLY INCLUDES SEVERAL THEATERS OF OPERATIONS.**

SOURCE: DICTIONARY OF BASIC MILITARY TERMS

The usage of TV by Soviet military authors also indicates that the term lacks specificity. It is frequently substituted for TVD or strategic sector. Zhukov, for example, states that in 1944:

According to our plan, the major offensive operations were to be launched in the South-Western theater of war so as to liberate the whole of the Ukraine west of the Dnieper and the Crimea [emphasis added].<sup>28/</sup>

The formal classification of this area was the South-Western Direction (napravlenie), a strategic sector.

Another example is given by Gen. Tyulenev, a Front commander in the Caucasus: "Within a few weeks [in August 1942] the entire Caucasian theatre of war became a network of defenses."<sup>29/</sup> In contrast, Marshal Grechko, also a participant of the Caucasus battles, categorically states that the Caucasus was "a specific theater of military operations."<sup>30/</sup> Even the definitive Soviet "HISTORY OF WORLD WAR II" contains similar disparities of usage. In volume four, the Pacific is treated as a theater of military operations whereas in volume seven it is characterized as a theater of war.<sup>31/</sup>

These imprecise usages of TV probably indicate that formally the TV is simply too large to have any functional strategic applications. It appears to be simply the aggregate of the more definitive theaters of operations. Colloquially, TV seems to be simply a literary substitute for the theater of operations, as is the contraction "theater."

### SECTION 3

#### NOTES

1. V. Andreev, "The Subdivision and Classification of Theaters of Military Operations," VOENNAYA MYS'L' (hereafter VM), No. 11 (1964), trans. CIA, FDD 924 (30 Jun 1965), p.19. Original emphasis deleted.
2. DICTIONARY OF BASIC MILITARY TERMS, p.220.
3. SLOVAR' RUSSKOGO YAZYKA (RUSSIAN LANGUAGE DICTIONARY), p.727.
4. Department of Defense, Joint Chiefs of Staff, DICTIONARY OF MILITARY AND ASSOCIATED TERMS, JCS Pub 1, 3 Sep 1974, p.333. Hereafter cited as JCS Pub 1.
5. CHASTOTNYJ RUSSKO-ANGLIJSKIY VOENNYJ SLOVAR'-MINIMUM (A FREQUENCY DICTIONARY OF RUSSIAN-ENGLISH MILITARY TERMS), p.119 and RUSSKO-ANGLIJSKIY VOENNO-MORSKOJ SLOVAR' (RUSSIAN-ENGLISH NAVAL DICTIONARY), p.642.
6. The dictionary refers the reader to "area of operations" for the definition of "theaters of operations." See JCS Pub 1, p.333. Area of operations is defined on p.33.
7. ISTORIYA VTOROJ MIROVOJ VOJNY 1939-1945 (HISTORY OF WORLD WAR II 1939-1945)(hereafter ISTORIYA 1939-1945), IV (Moscow: Vojenizdat, 1975), excerpted & trans. JPRS, in TRANSLATIONS ON USSR MILITARY AFFAIRS (hereafter TUMA), No. 1201 (24 Nov 1975), p.65. 6
8. A. Vasilevskiy, "The Campaign in the Far East," VOENNO-ISTORICHESKIY ZHURNAL (hereafter VIZ), No. 10 (Oct 1975), trans. JPRS, in TUMA, No. 1203 (2 Dec 1975), pp.22-23.
9. V.D. Sokolovskiy, SOVIET MILITARY STRATEGY, 3 ed., p.6.
10. V. Ye. Savkin, THE BASIC PRINCIPLES OF OPERATIONAL ART AND TACTICS, p.206.
11. P. Zhilin and E. Egorov, "Book on the History of Military Art," VM, No. 10 (1966), trans. CIA, FPIR 0504/67, 29 May 1967, p.69.

12. Andreev, p. 19.
13. Ibid.
14. Donald W. Treadgold, TWENTIETH CENTURY RUSSIA, 4th Ed., p. 154.
15. THE OFFICER'S HANDBOOK, p. 256.
16. Ibid., pp. 256-257. Maj. Gen. Mikhaylovskiy and Col. Vyrosov, "The Great Patriotic War and the Postwar Period: Supreme Organs for Conduct of War," VIZ, No. 4 (1978), trans. JPRS, in TUMA, No. 1360 (3 Jul 1978), pp. 32-33, presents the more obtuse: "The European regional command has three TVD's subordinate to it: Northern Europe, Central Europe, and Southern Europe."

Admiral Andreev, p. 17, lists four, the addition being a Mediterranean TVD.

Marshal Sokolovskiy also ascribes four TVDs to NATO. See Sokolovskiy, p. 341.

17. S. Bronevskiy, "The Factors of Space and Time in Military Operations," VM, No. 7 (1963), trans. CIA, FDD 956 (30 Mar 1966), p. 47.
18. DICTIONARY OF BASIC MILITARY TERMS, p. 214.
19. G.K. Zhukov, THE MEMOIRS OF MARSHAL ZHUKOV, p. 185, for the Western and Southwestern directions and, p. 210, for the Northwestern.
20. Zhukov, passim. S.M. Shtemenko, THE SOVIET GENERAL STAFF AT WAR: 1941-1945, passim. Hereafter cited as "Book One." S.M. Shtemenko, GENERAL'NYJ SHTAB V GODY VOJNY KNIGA VTORAYA (THE GENERAL STAFF IN THE WAR YEARS), trans. JPRS, JPRS 65733-1 and 65733-2, 22 Sept. 1975, passim, Hereafter cited as "Book Two."
21. V.P. Morozov, "Some Questions on the Organization of Strategic Leadership in the Great Patriotic War," ISTORIYA SSR, No. 3, May - June 1975, trans. JPRS, in TUMA, No. 1164 (21 Jul. 1975), p. 39
22. Zhukov, pp. 352-353.

23. "Operatsionnoe Napravlenie," DICTIONARY OF BASIC MILITARY TERMS, p. 145.
24. M. Cherednichenko, "Razvitie Teorii Strategicheskoy Nastupatel'noj Operatsii v 1945 - 1953" (Development of Theory of Strategic Offensive Operations - 1945-1953), VIZ, No. 8 (1976), p. 43.
25. "Teatr Vojny," DICTIONARY OF BASIC MILITARY TERMS, p. 220.
26. CHASTOTNYJ RUSSKO-ANGLIJSKIY VOENNYJ SLOVAR'-MINIMUM.
27. "Teatr Vojny," DICTIONARY OF BASIC MILITARY TERMS, p. 220.
28. Zhukov, p. 494.
29. Quoted in Alexander Werth, RUSSIA AT WAR: 1941-1945, p. 526.
30. Andrei Grechko, BATTLE FOR THE CAUCASUS, p. 14.
31. ISTORIYA 1939-1945, IV, p. 67: "The armed struggle in the Pacific, in Southeast Asia and in other theaters of military operations also assumed a protracted character." ISTORIYA 1939 - 1945, VII, p. 457, notes: "In 1943 Allied forces in the Pacific theater of war gradually pushed Japan out of its occupied territories..."

## SECTION 4

### STRATEGIC COMMAND AND CONTROL OF FRONTS

#### 4.1 INTRODUCTION

This chapter addresses the question of Soviet strategic command and control ( $C^2$ ) during World War II (WW II). For the purposes of this analysis strategic  $C^2$  is defined as the command and control of fronts. The chapter will focus upon how the Soviets managed combat on a single front line stretching from the Baltic to the Black Sea, and how multi- and single front operations were controlled.

#### 4.2 FRONT

In order to properly understand Soviet strategic  $C^2$  it is essential to appreciate the Soviet understanding of "front". Front has two meanings. It is both the "highest strategic formation of armed forces" and the "forward zone of a country at war."<sup>1/</sup> It can be and is used interchangeably to mean both. For western readers this can create confusion unless the context is obvious.

The front as a military organization is a formation (obedinenie). Except for its headquarters elements, a front is not a standardized unit. During WW II the composition of fronts varied from 2 to 10 subordinate armies depending upon operational requirements.<sup>2/</sup> Shtemenko aptly illustrates this feature of the front:

Each time there was a new operation, the composition of the fronts was revised. They were given new forces (or forces were removed), but in that combination of combat arms and character of large units [divisions and corps] dictated by the situation.<sup>3/</sup>

Each front was responsible for a significant length of the FEBA.<sup>4/</sup> Its composition was determined by the military situation, its area of operations and the operations planned to take place within that sector.

For this reason, fronts were always named geographically or directionally: the Northern, Western Bryansk, Crimean, Stalingrad, Leningrad and Northern Caucasian Fronts. The Soviets simply combined both meanings of front into one. The name of the front related also to its area of operations (AO). At the battle of Kursk, a "Reserve Front" was created which when committed was renamed the Steppe Front. Similarly, this explains why fronts were abolished (operations in their areas ceased) or were renamed (to reflect their new AO).

The Soviets chose to manage their deployed forces on the basis of areas of operations rather than by units.\* The front then should be understood as a span of control entity responsible for the control of operations within a significant area of operations. In this sense the front is simultaneously both of the word's meanings. It is at the same time a segment of a FEBA (AO) and a military entity.

Both Soviet WWI and preWW II planning envisioned the front as a virtual "theater command." During World War I deployed Russian forces were grouped under five front commands -- North, Northwest, West, Southwest and Caucasus.<sup>5/</sup> PreWW II planning called for forward defense of the western borders by a front in each of the western strategic axes, the Northwestern Front, Western Front and Southwestern Front. These fronts were to defend border sectors of 300, 470 and 865 kms, respectively.<sup>6/</sup> Multi-front, coordinated operations were not considered; each front would operate independently within its strategic sector. Two other fronts, the Northern to defend the Soviet-Finnish border and the Southern to defend the western Black Sea region, were to be activated if required.

---

\* This permitted continuity of control within a geographic area by a front command while permitting flexibility in the deployment and disposition of units (divisions and corps) between the battle areas.

#### 4.3 SUPREME HIGH COMMAND/GENERAL STAFF

##### 4.3.1 Introduction

Throughout WW II, Soviet strategic C<sup>2</sup> was centralized in two organs, the Supreme High Command and the Soviet General Staff. The Headquarters of the Supreme High Command (Stavka Verhovnogo Glavnogo Komandovaniya) was a child of WW II. It was the result of a series of evolutionary improvisations that began on the second day of the war. To a lesser extent, the role of the General Staff, the operational organ of the Supreme High Command (SHC), was similarly evolutionary.

##### 4.3.2 Evolution of the Supreme High Command

As stated earlier, prewar defense plans dictated a front in each of the three strategic sectors of the western border. These fronts were to manage the combat operations of the frontier forces to defend the borders and the approaches to Leningrad, Moscow, and Kiev. Centralized management of these fronts was the responsibility of three "branches" of the Operations Directorate of the General Staff (GS). Each branch managed a single strategic sector. Strategic C<sup>2</sup>, not properly considered in the prewar period,<sup>7/</sup> was centralized in the position of the Commissar of Defense. Figure 4.1 depicts this C<sup>2</sup> arrangement. The general strategic C<sup>2</sup> equation was branch = front = strategic sector, a simple one to one arrangement.

These prewar plans demonstrate that a significant role was envisioned for the fronts. Figure 4.2, portraying the communications two days after the German attack, illustrates the front's position in the scheme. Note the lack of skip echelon capability. The front was a critical C<sup>2</sup> node in the prewar plans.

The disastrous consequences of the German invasion on 22 June 1941 resulted in a series of Soviet strategic C<sup>2</sup> rearrangements which were completed in August. The first step was the creation of a formal body responsible for strategic military command and

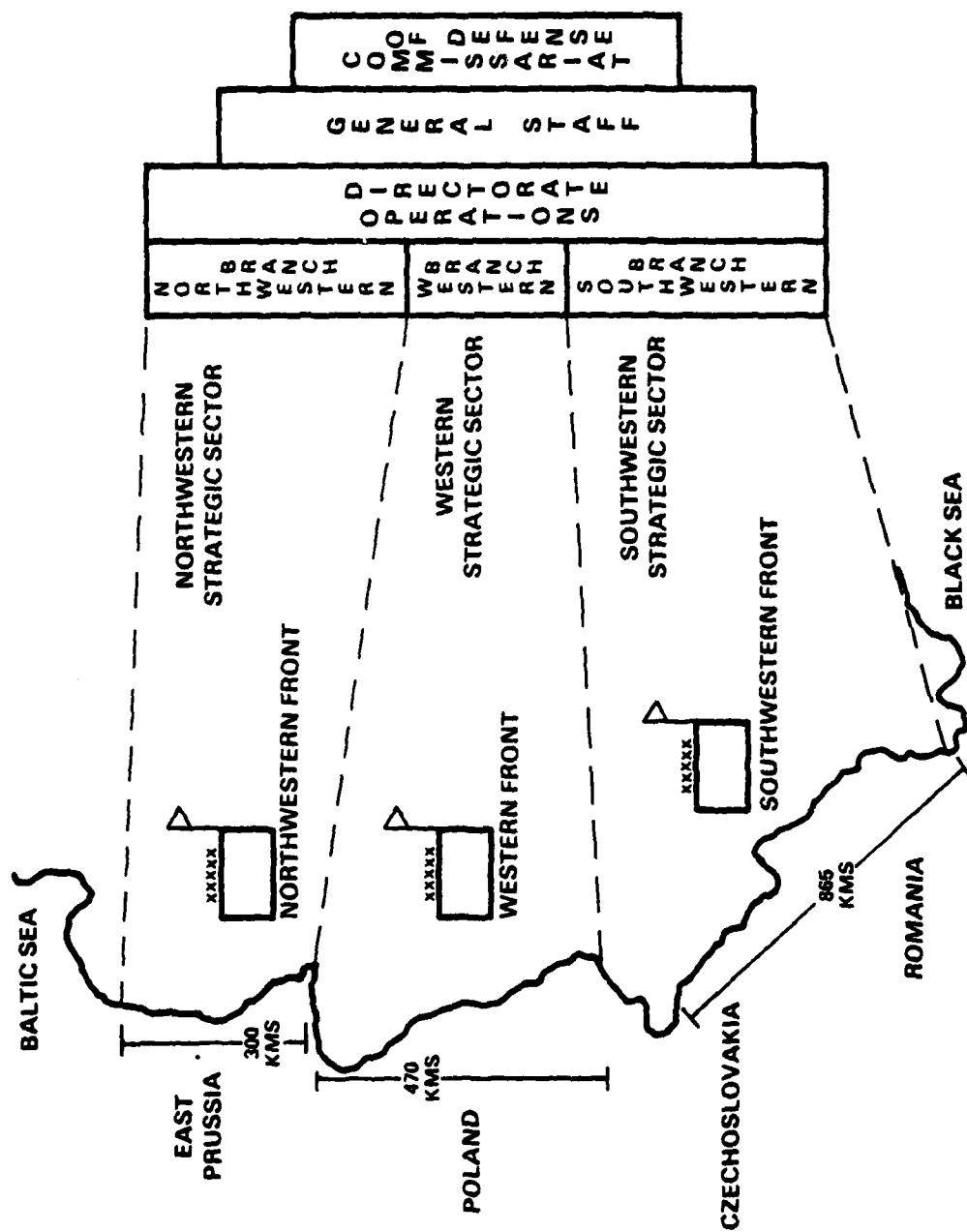


Figure 4.1. Strategic C<sup>2</sup> scheme - June 1941.

67360079W

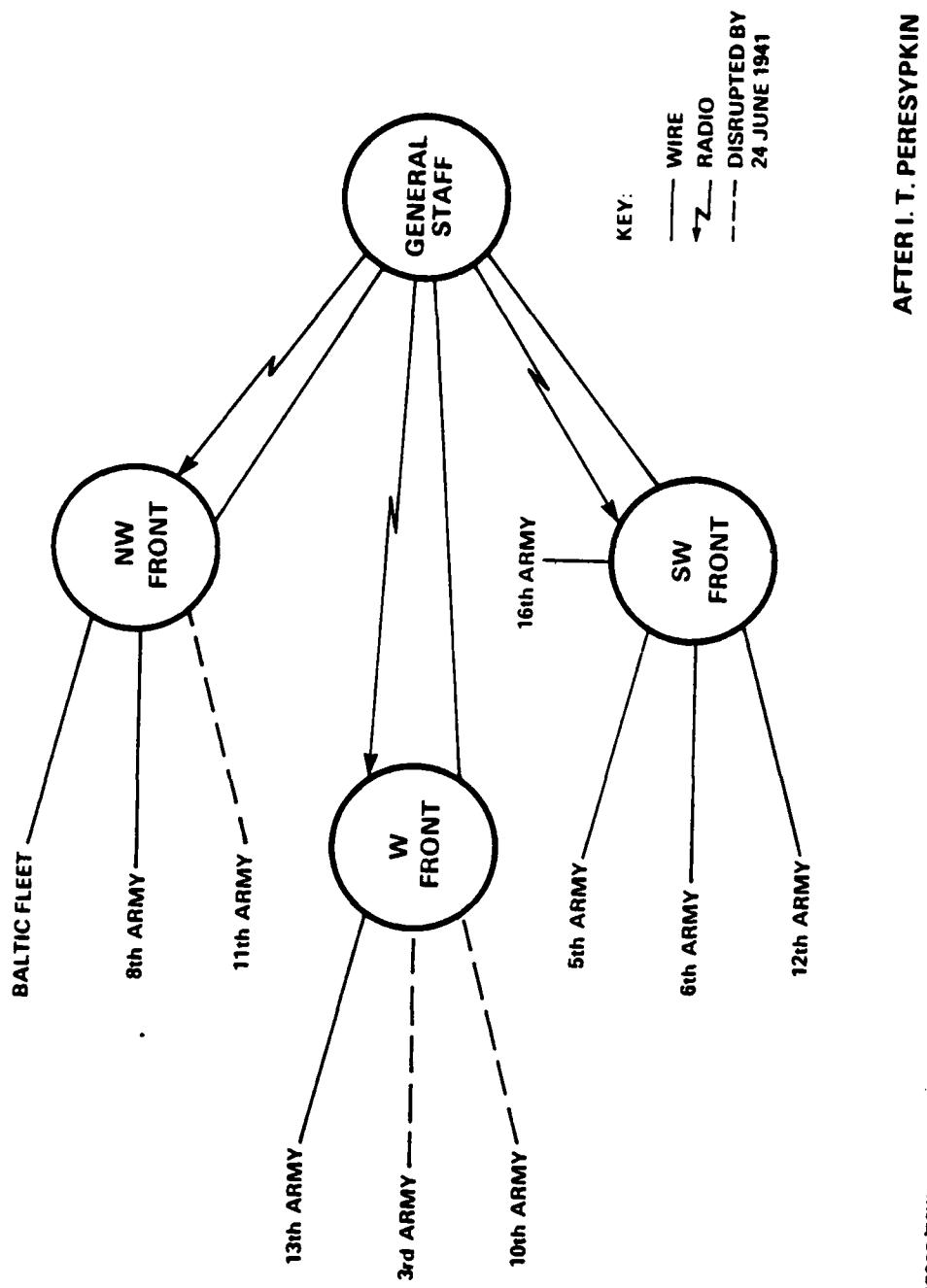


Figure 4.2. Strategic C<sup>2</sup> communications - 24 June 1941.

control. On 23 June the Headquarters of the High Command (Stavka Glavnogo Komandovaniya) of the Soviet Armed Forces was created. However, this body suffered from a critical failing. The Commissar of Defense, Timoshenko, was named Commander-in-Chief rather than Stalin. As a result, as Marshal Zhukov observed, "there were actually two Commanders-in-Chief: Commissar for Defence Timoshenko de jure, in accordance with the Decree, and Stalin, de facto."<sup>8/</sup>

The next step in the evolution of strategic C<sup>2</sup> was taken on 10 July when the State Defense Council created the high commands for the strategic axes. This resulted in a semantical change from Hq, High Command, to the Headquarters of the Supreme Command (Stavka Verhovnogo Komandovaniya). Finally on 8 August, Stalin was "appointed" Supreme Commander and the Headquarters Supreme Command became the Stavka VGK (Stavka Verhovnogo Glavnogo Komandovaniya), the Hqs of the Supreme High Command.\*

Modern Soviet military and political historians portray the Stavka, VGK as a collective body with active participation by the communist party's Politburo. In fact it actually served as an institutional legitimization for Stalin's control of the military. As Marshal Vasilevskiy, a member of the Stavka VGK, commented in a 1975 interview published in a Bulgarian newspaper:

The SHC is understood as a body which sat constantly under the Supreme Commander-in-Chief I. [sic] Stalin with a membership in which it was created, but this was not the case. A majority of its members at the same time held responsible positions and were often far away from Moscow, above all at the front. During the war, the SHC never met once in its full membership [emphasis added].<sup>9/</sup>

\*Throughout this paper Stavka, VGK and its translation, General Headquarters, Supreme High Command (GHQ SHC), are used interchangeably.

In another 1975 interview Vasilevskiy, responding to a question whether there were disagreements in the Stavka, answered:

Naturally! It could not be otherwise. True, few people would venture to argue with Stalin. But sometimes, listening to very heated arguments, Stalin himself would perceive the truth and would be capable of changing a decision which had already, it would seem, been taken [emphasis added].<sup>10/</sup>

From the above it is obvious that the Headquarters of the Supreme High Command was far from the collective decision making body portrayed by contemporary Soviet historians. The evidence clearly indicates that Stalin was the sole arbiter of strategic authority. Simply, the Stavka represented strategic C<sup>2</sup> by Stalin's diktat.

#### 4.3.3 Evolution of the General Staff

The evolution of the General Staff (GS) was less dramatic than that of the Stavka. The General Staff had existed since 1935, created out of the Workers' and Peasants' Red Army (RKKA) Staff, and inherited the RKKA Staff's responsibilities:

The responsibility to develop plans for deploying troops and their actions from the beginning of a war as well as for the organization and employment of all ground, naval and air forces and the organization for the rear area and logistics support of the armed forces during wartime was placed on it. It engaged in the operational preparation of theaters of military operations, preparing and using routes and lines of communication, etc.<sup>11/</sup>

Prewar planning called for GS management of the three western border fronts by the respective branches of the Operations Directorate of the GS. Once war began the requirement to create more than one front in each of the strategic sectors soon resulted in difficulties. Although operations personnel were transferred

from the other branches (i.e., Mid East), the lack of communications, the inexperience of many field commanders and the power of the German attack prevented any effective centralized management.<sup>12/</sup> The creation of the high commands in the strategic sectors returned, on paper, the essence of the prewar arrangement of one to one: branch = high command = strategic sector.

However control problems still remained, probably due to the excessive width of the strategic sectors and certainly due to the continued disruptions in communications. In August 1941, the northwestern, western and southwestern branches were formally eliminated as organizational entities. They were replaced by a system in which a "special group of operations officers under an experienced chief... [were] allocated to each Front."<sup>13/</sup> Actually these chiefs were "chiefs of sectors" whose sectors corresponded to front AOs.<sup>14/</sup> The strategic sectors were still retained and presumably the chiefs of sectors were correspondingly grouped. In fact, there may have been a Deputy Chief of Operations Directorate for each strategic sector as was the case for the Far East.<sup>15/</sup> These changes essentially completed the significant transformations that pertained to the key Operations Directorate of the General Staff. Figure 4.3 depicts the basic C<sup>2</sup> scheme.

#### 4.3.4 Stavka/General Staff Strategic C<sup>2</sup>.

The Stavka VGK was by decree and in fact the supreme military C<sup>2</sup> entity in the Soviet Union. The Stavka, according to Marshal Kulikov's 1975 article,

led the Armed Forces in war and conducted measures aimed at their development, while determining the strategic and operational tasks of the fronts, and working out concepts of campaigns and strategic operations, organizing strategic utilization of different arms of the Armed Forces and their interaction, carrying out material-technical supply of troops, and managing the partisan movement.

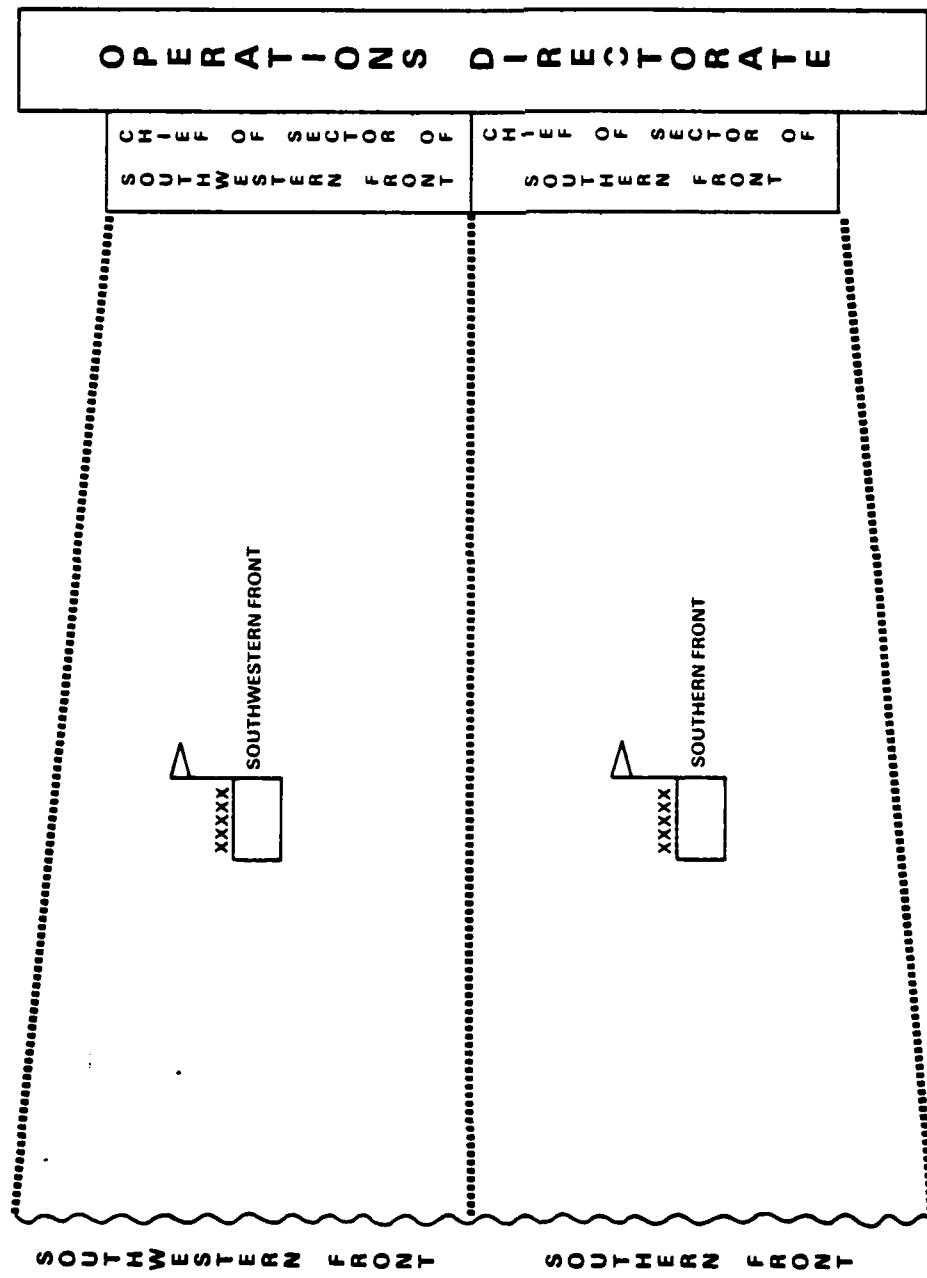


Figure 4.3. Strategic C<sup>2</sup> of Southwestern Strategic Sector - September 1941.

Only the Headquarters, Supreme High Command [Stavka VGK] issued directives to the troops.<sup>16/</sup>

Such wide-ranging responsibilities would seem to demand a large headquarters. But that was not the case. The Stavka was a very small organization. The original Stavka of the High Command numbered only seven members.<sup>17/</sup> Nor were there any significant changes to this number of formal members throughout the war. The composition at the end of WW II consisted of six.<sup>18/</sup> Yet the Stavka issued extremely detailed directives to the fronts. For example on August 10, 1942, the Stavka ordered the North Caucasian Front commander

to immediately move the 32nd Guards Infantry Division which together with the 236th Infantry Division should straddle the Maikop-Tuapse road three to four lines in depth; it is your personal responsibility not to allow the enemy to reach Tuapse under any circumstances.

The 77th Infantry is to be immediately transferred from Taman and promptly used to reinforce the Novorossijsk defences; the defence of the Taman Peninsula is to be entrusted to the shore units of the Black Sea Fleet.<sup>19/</sup>

Such detailed direction, and the planning it depends upon, was obviously beyond the capabilities of any seven individuals irrespective of their qualifications. This was particularly true of individuals who, as Vasilevskiy observed, had additional responsibilities and were often absent from Moscow. It was the General Staff, the "creative working organ" of the Stavka, that provided the Stavka actual strategic C<sup>2</sup> capability. The relationship can best be described as a form of mutualism. So interrelated were the Stavka/GS that no meaningful discussion of either is possible without including the other. Simply, the Stavka was the decision maker and the GS was its planner, executor and controller.

During the war the GS became the most powerful entity within the Commissariat of Defense. The Chief of the GS was a formal member of the Stavka throughout the war. The Chief of Operations Directorate was responsible for keeping Stalin informed of the military situation. According to a recent Soviet history, the General Staff had the responsibility

to develop proposals on plans for military campaigns and major strategic operations in accordance with directives of Hq, SHC [Stavka VGK] and in coordination with commanders of fronts, fleets and staffs of the Armed Forces and the arms and services, and with the central directorates; to support the decisions and plans of action of Hq SHC and to control their implementation;...to organize operational-strategic troop movements;...and to exercise control of the organizational structure of the forces, of the formation and reorganization of large units and formations....20/

The work of the GS was focused primarily in the Operations Directorate which was responsible for planning and maintaining cognizance of the situation at the fronts.

The initial failures in 1941 gave impetus to both the Stavka and GS for maximizing the centralization of military planning, direction and command and control. Together these entities assumed much of the operational responsibilities of the fronts. As a recent history noted,

the General Headquarters [Stavka] of the Supreme High Command and the General Staff dealt directly with problems of operational direction. During the planning of many operations, they not only briefed front commands on the plan and goals of operations, but also determined the axes of the main strikes, the composition and missions of the assault groups and their formation, the procedure for committing tank armies, mechanized cavalry groups and second echelons to combat, use of the aviation and the systems of interaction among the branches of armed forces,

as well as material-technical support measures. (emphasis added)21/

Stavka approval of front operational plans was mandatory.

This centralization of strategic and operational C<sup>2</sup> resulted in the fronts' assumption of army operational responsibilities. In effect, the result was Stavka/GS monopolization of both operational and strategic functions and relegation of front and army echelons to basically operational-tactical functions. The front was no longer a purely operational planning and control entity.22/

For such a degree of centralization of planning and control, communications were a prerequisite. During the early weeks of the war, both the GS and the fronts suffered massive communications disruptions. As the Soviet armies retreated further east into the denser networks around Moscow communications stabilized. From September 6, 1941, the Stavka/GS maintained multi-path redundant radio and wire direct communications to both the deployed fronts and their armies.23/

These links were in turn augmented by the NKVD (now KGB) controlled "HF" landline telephone system which linked selected officials at armies and fronts with the Stavka/GS.24/ These systems allowed the detailed information exchanges required for centralized strategic C<sup>2</sup>.

An additional manifestation of Stavka/GS centralized C<sup>2</sup>, was the control of the distribution of reserves and materiel. Both remained under strict Stavka/GS control throughout the war. The reserves comprised all arms and branches of the service from communications units to tank units and in size up to armies. Their employment was an important means of effecting control of fronts. Through control of the reserve the Stavka/GS had a physical means of

restraint on front actions by denying the fronts the military capability to perform other than as directed. The reserves of the VGK were "a potent weapon,"<sup>25/</sup> as Zhukov described them, against the Germans. But they were equally potent against any unauthorized adventurism on the part of the front commanders. A recent history described this relationship between Stavka/GS control and the use of reserves:

By defining the missions of the fronts in good time, maneuvering the reserves and committing them to battle when necessary, the General Headquarters [Stavka] of the Supreme High Command changed the balance of forces and means along selected axes for its own benefit and increased efforts to exploit success in an offensive or to repel an enemy strike in defense, thereby imposing its will on the enemy and achieving great strategic success.<sup>26/</sup>

#### 4.4 INTERMEDIARY COMMAND AND CONTROL ENTITIES.

Soviet strategic C<sup>2</sup> is typically portrayed as a straight line between the Stavka/GS and the fronts (Figure 4.4). In actuality, this is an oversimplification. Two separate forms of deployed intermediary strategic control entities were employed during the course of WW II -- the high command and the Stavka representative. A 1978 Soviet article on strategic C<sup>2</sup> entities provided the schematic illustrated at Figure 4.5.<sup>27/</sup>

Intermediary strategic C<sup>2</sup> entities were required for numerous reasons. Probably the most significant was the lack of experienced commanders in the Soviet Red Army in 1941. Stalin's purges of the 1930s decimated the officer ranks and particularly the senior commanders. Soviet tabulations of those purged list "3 of the 5 marshals, 3 of the 4 first-rank army commanders [there were no general ranks at this time], all 12 of the second-rank army commanders, 60 of the 67 corps commanders, 136 of 199 division commanders, and 221 of 397 brigade commanders...."<sup>28/</sup>

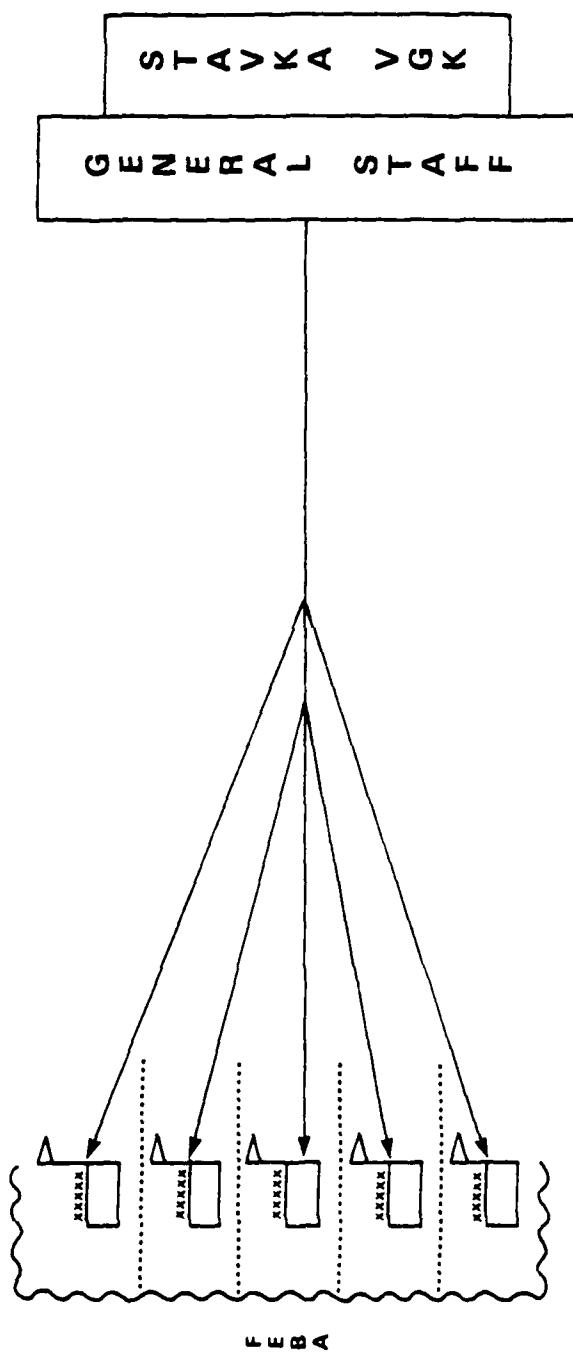
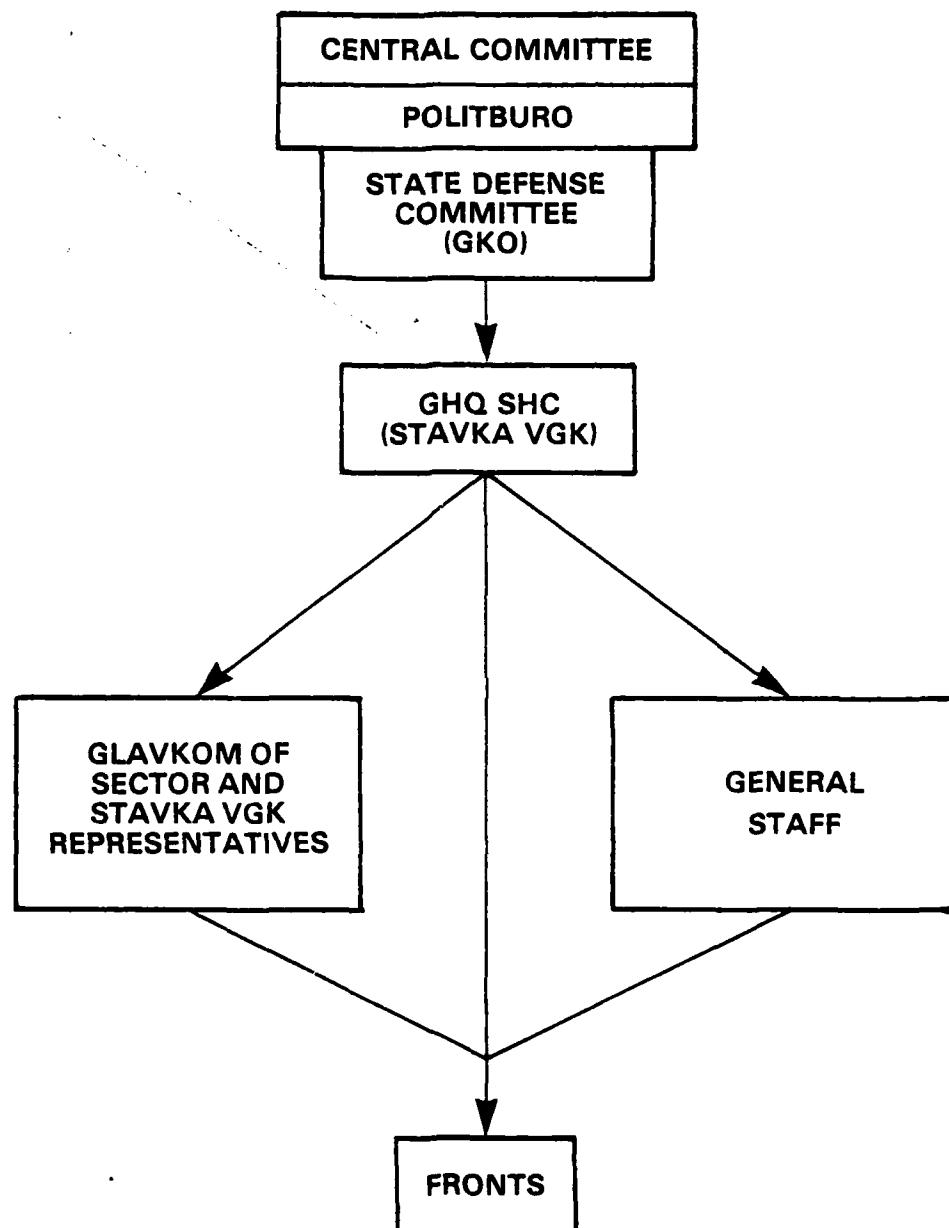


Figure 4.4. Western view of Soviet WWII strategic C<sup>2</sup>.

67368/79W



AFTER MIKHAYLOVSKIY AND VYRODOV

5736B/79W

Figure 4.5. Soviet view of Soviet WWII strategic C<sup>2</sup>.

The situation at the regimental level was no better. In 1940, the autumn report of the Inspector General of Infantry showed

that, of 225 regimental commanders on active duty that summer, not one had been educated in a military academy, 25 had finished a military school, and the remaining 200 had only completed the courses for junior lieutenants. At the beginning of 1940 more than 70 per cent of the division commanders, about 70 per cent of regimental commanders...had occupied these positions for a year only.<sup>29/</sup>

This lack of experience was bound to complicate the execution of Stavka/GS directives. Some form of on-site strategic C<sup>2</sup> was required to aid and direct the fronts in planning the implementation of the operations planned in Moscow.

Another significant imperative for intermediary C<sup>2</sup> entities was the absence of both prewar doctrine and experience for multi-front coordinated operations. Prewar planning was predicated upon a single front within a strategic sector as the largest span of control command. Mutual operations between fronts in different strategic sectors were not envisioned. A combination of the breadth and power of the German attack; the massive disruptions in C<sup>2</sup> communications; and the difficulties attendant to directing operations by a single front in such a large area of operations necessitated a change. Additional fronts and separate armies were created which consequently reduced the respective assigned areas of operations. By December 1941 the five fronts formed at the beginning of the war had increased to eight plus four separate armies.<sup>30/</sup>

The immediate consequence of this proliferation of fronts was the necessity for mutual, cooperative action by fronts within a single strategic sector. Although multifront operations could be planned at Moscow there was no insurance that they would be executed correctly. The Stavka/GS recognized that commanders "assess the

situation and position of the troops from their own more or less narrow, or let us say local, positions."<sup>31/</sup> Their interests rarely transcended their AOs. Some mechanism was required to develop and direct measures to assure coordination between fronts operating contiguously.

Lastly, effective centralized C<sup>2</sup> is particularly dependent upon receiving accurate information of the situation and the actual fulfillment by the executors of directive. The Soviets realized that it is only human nature for a commander to favorably distort reports to the GS. Shtemenko, for example, observed

inasmuch as the commander bears responsibility for the actions of his unit or large unit, of course he strives to ensure that these actions look good. Therefore, intentionally or unintentionally, he is inclined to embellish reality.<sup>32/</sup>

An independent entity was clearly required to insure accurate reporting and execution of orders and to correct any errors in both.

#### 4.4.1 High Commands

The first intermediary strategic C<sup>2</sup> entity employed was the high command (GLAVNOKOMANDOVANIE). On 10 July 1941 three high commands were created, one for each of the western strategic sectors. According to the former Chief of Staff of the Southwest Sector High Command, their formation was a result of a number of factors:

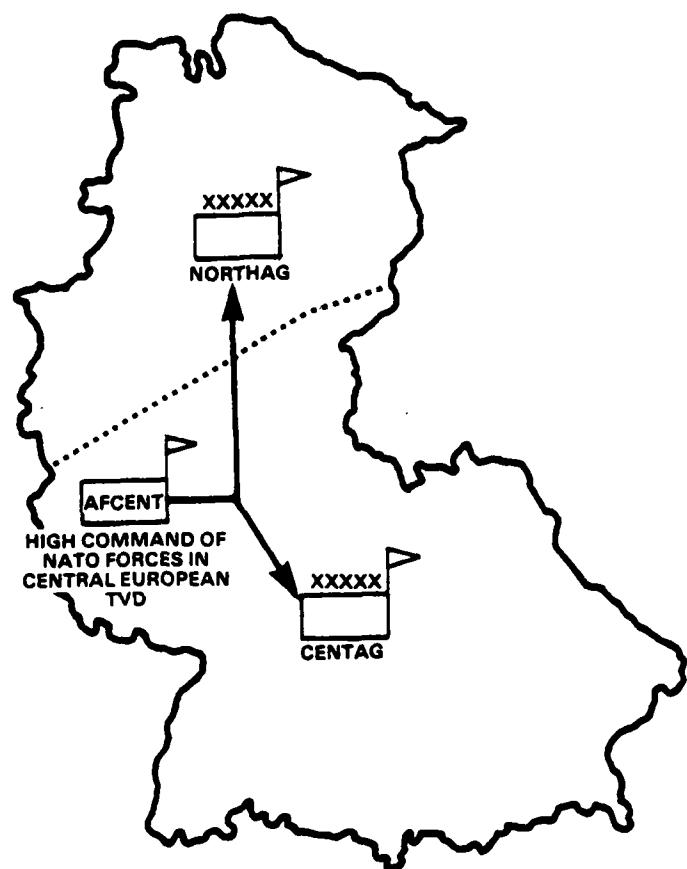
In connection with the expansion of the general front of struggle with the fascist German troops, rapid changes in the situation, disruptions in communications with the fronts and disruption of coordination among them at the beginning of the Great Patriotic War, the need arose to bring the operational-strategic leadership nearer to the troops....<sup>33/</sup>

According to the Soviet Military Encyclopedia, a high command is "an agency of control, constituted to direct armed forces in a strategic axis or within a theater of operations."<sup>34/</sup> It is headed by a commander-in-chief (glavonokomanduyushchij) which is the "highest military post in any theater of military operations or strategic axis, and in the independent arms of military forces."<sup>35/</sup> The CINC, with his staff, commands "the unified operations of ground forces, air forces and naval forces."<sup>36/</sup> High commands, according to the Encyclopedia, currently exist in NATO. For example, AFNORTH, AFCENT and AFSOUTH are high commands<sup>37/</sup>--intermediary strategic echelons between SACEUR and the operational formations (army groups). Figure 4.6 portrays this C<sup>2</sup> arrangement for NATO's Central Region in Soviet terms.

The Soviet assessment of WW II experience with high commands is mixed. The first high commands (July-September 1941) are evaluated as minimally effective at best. For example, Marshal Kulikov, observes that they "played a certain role in the first year of the war when the Soviet Army carried out strategic defense."<sup>38/</sup> Other commentators are less kind. Shtemenko dismisses these high commands as "a superfluous intermediate stage between GHQ [Stavka] and the fronts."<sup>39/</sup> A brief review of the available information will illuminate the bases for these assessments.

The high commands were formed to both simplify strategic C<sup>2</sup> and correct the C<sup>2</sup> mistakes of the Stavka/GS.<sup>40/</sup> Morozov, in an excellent 1975 article, states that it was

considered that they [the high commands] would provide HQ SHC with the capability of better organizing coordination of front ground forces formations, the Air Forces and the Navy.... Each of the commanders-in-chief coordinated the actions of several fronts (and in maritime areas also the Navy) in executing a unified strategic mission.<sup>41/</sup>



57368/79W

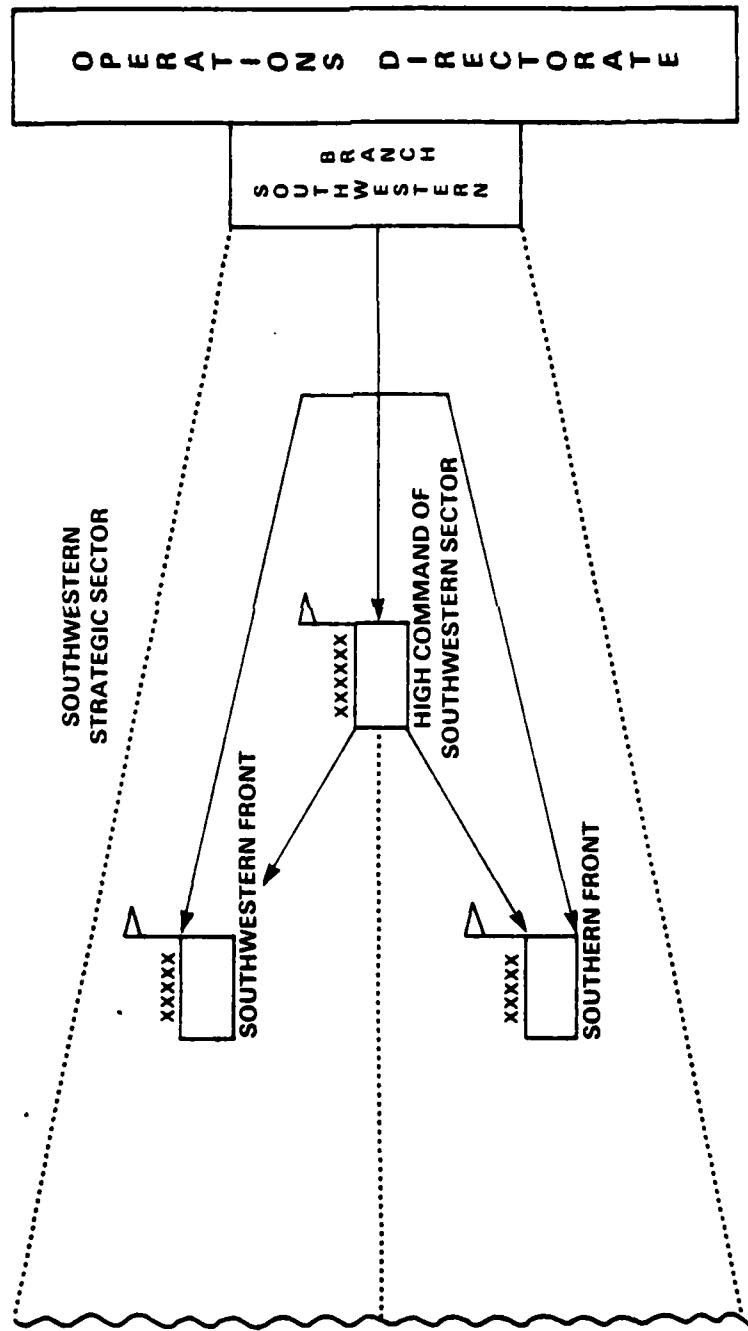
Figure 4.6.  $C^2$  of NATO's Central European TVD - the Soviet view.

Particularly relevant is the fact that the high commands were created not on the recommendation of the GS and their charter included the correction of GS errors in strategic C<sup>2</sup>.

The high commands, schematically, represented a modified return to the prewar concept of one to one strategic C<sup>2</sup>. In this new version the high command replaced the front as the largest span of control echelon deployed within a strategic sector. The Northwest Sector High Command controlled the Northern and Northwestern Fronts and the Baltic Fleet; the Western Sector High Command controlled the Western Front and Pinsk Flotilla; and the Southwestern Sector High Command controlled the Southwestern and Southern Fronts and the Black Sea Fleet.<sup>42/</sup> Figure 4.7 portrays this C<sup>2</sup> concept of GS Operations Directorate branch-high command-strategic sector.

Organizationally these high commands appeared to be major commands. Each of the CINCs were marshals and former members of the first Stavka. Staffs were created to manage both frontal forces and also the relevant arms and branches of the services. The Southwestern High Command, for example, had the following staff departments: Operations, Intelligence, Rear Services, Military Transportation and Communications. In addition, the following commanders or chiefs of arms/branches composed the headquarters: aviation, tank troops, artillery, engineer troops and medical services.<sup>43/</sup> Although the precise positions of all these commanders/chiefs are not known, the commander of aviation was also a Commander-in-Chief, subordinate to the High Command CINC.<sup>44/</sup>

There is a paucity of data concerning these early high commands' activities and authority. The Southwestern Sector High Command CINC, Marshal Budennyy, had the authority to resubordinate divisions between fronts. He also had the authority to order a front commander to prepare and execute a counterattack, task front commanders for logistic support to armies, draw upon local civilian



67368/79W

Figure 4.7. Ground forces strategic C<sup>2</sup> schematic for the Southwestern Sector - July 1941.

resources needed by the military and activate reserve units within the sector. Yet he required Stavka authorization to withdraw armies to better defense lines.<sup>45/</sup>

The primary functions of the high commands appear to have been to provide on-site direction and interfront coordination of the execution of Stavka directives. There is no evidence that the high commands supplanted in any way the authority of the Stavka/GS. They acted more as the Stavka's surrogate to the fronts. For example, a 19 August Stavka directive to the Southwestern Sector High Command contained the front's defensive sectors, each front's composition of divisions with stipulated front reserves, and the number of divisions assigned to the High Command's reserve.<sup>46/</sup> With a strength of 60 divisions for a defensive sector of some 1300 kms, the High Command had direct control over only the seven divisions assigned to its reserves. Obviously the high command was not intended to play a major role as a operational organ. Insuring compliance with Stavka/GS directives and coordinating interfront activities were, practically, the extent of its capabilities.

Meanwhile the General Staff had begun a management reorganization within the Operations Directorate. The Northwestern, Western and Southwestern branches of the GS Operations Directorate were eliminated by August 1941. These branches had provided the strategic operational planning for the forces in each of the strategic sectors along the Soviet-German Front. Their elimination essentially signaled the end of the attempts to manage the deployed forces with strategic sectors as the basic managerial division. Instead GS operations staff personnel were organized on the basis of front sectors under chiefs of sectors.<sup>47/</sup> Although strategic operations were still planned by the GS on a strategic sector basis, this reorganization eliminated a centralized formal organization directly responsible for the strategic sector as a whole. Organizationally

it became easier to bypass the high command and deal directly with the fronts. As Figure 4.8 illustrates, this new scheme did make the high commands somewhat superfluous.

The effects of this change were significant to the authority of the CINCs of High Commands. They were, by mid-September, virtually ignored. The events of 10-11 September 1941 regarding the Southwestern Front's continued defense of the virtually encircled city of Kiev provide an excellent example. Kirponos, the Front commander, on the morning of the 10th sent a direct message to the Stavka/GS requesting withdrawal from Kiev to a new defense line. The Stavka/GS responded that evening with a direct telephone call from the Chief of the General Staff passing on its refusal. When these exchanges became known to the Sector High Command,<sup>48/</sup> the CINC and military council sent a message the morning of the 11th supporting the Southwestern Front's request. This message of the High Command was ignored and never answered. Instead Stalin directly phoned the Southwestern Front commander on the evening of the 11th ordering him to coordinate an attack with the Bryansk Front (not subordinate to the Southwestern Sector High Command), prepare both a new defense line and for the evacuation of Kiev, but not to surrender Kiev.<sup>49/</sup> Neither the front command nor the Stavka/GS considered that it was imperative to either inform the high command of or include them in these decisions.

Perhaps the best example of the impotence of the high commands by September involved the new Southwestern Sector High Command CINC, Marshal Timoshenko, on 17th September. By the 16th the situation around Kiev was hopeless. To prevent the loss of the encircled armies there, Timoshenko "issued a verbal order for front troops to break out of the encirclement. This order was delivered by Gen. I. Kh. Bagramyan [Deputy Chief of Staff Southwestern Front]

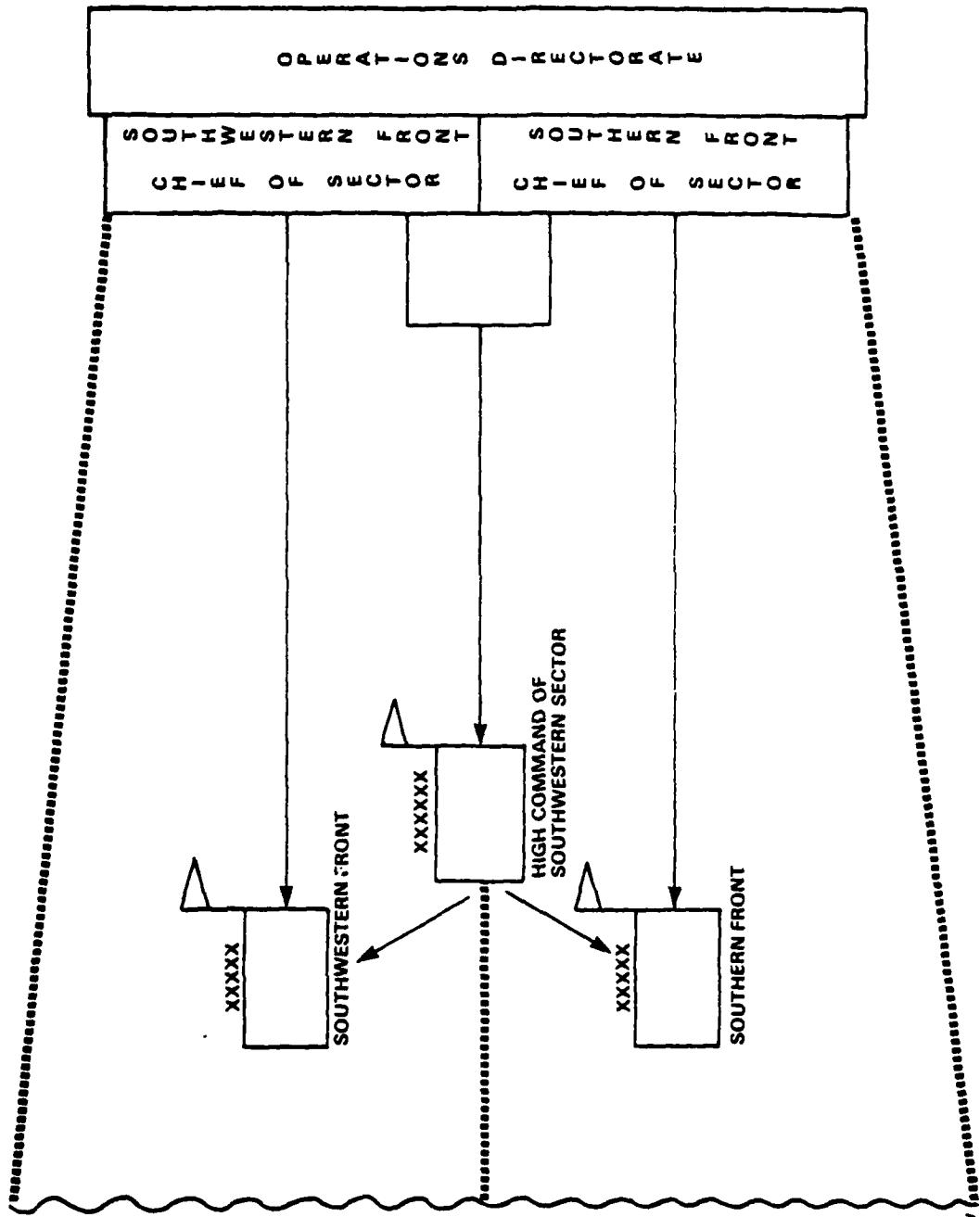


Figure 4.8. Ground forces strategic C<sup>2</sup> schematic for the Southwestern Sector - August 1941.

57368/79W

by aircraft on the following day."50/ The Southwestern Front commander upon receipt of this verbal order sent the following message to the Stavka:

Glavkom [CINC] Timoshenko through the person of the deputy chief of staff of the front issued verbal instructions: basic assignment - withdrawal of Front armies to river Psel, and destruction of enemy mobile formations in Romny-Lubny area. To leave behind minimum forces to cover Dnieper and Kiev.

Written directives of Glavkom especially make no mention of withdrawal to river Psel and authorize withdrawal from Kiev garrison of only a part of the forces. There is a contradiction. Which order to fulfill? I consider that pulling troops back to the Psel is correct, which means immediate and complete withdrawal from Kiev and the river Dnieper. Urgently request your instruction. (emphasis added)51/

On 26 September 1941 the last of the initial high commands was abolished. Although three others were created during the strategic defensive period (Western from February to May 1941, Southwestern from December 1941 to June 1942, and North Caucasian from April to May 1942), the available data indicates that their effectiveness was no better. After June 1942, the echelon was not used again on the Soviet-German Front.

Although never adequately stated, Soviet commentators of WW II admit that to a large extent the circumvention of the high command's authority by the Stavka/GS doomed these entities to failure. Zhukov, for example, admits that the existence of the high commands

did not rule out interference by the General Headquarters [Stavka] in the affairs of the fronts, fleets, and even separate armies. This was because at the time our sorely limited reserves of ground and air forces were completely in the hands of the Supreme Command. Naturally enough, this could not fail to affect the independence of the Commanders-in-Chief of various sectors.52/

The military situation was also a contributor to the high commands' failure. During the period of their existence the war was a continuous string of Soviet retreats and disasters. The lack of a stable line of defense, the inexperience of commanders, and the lack of personnel and materiel all contributed to a situation virtually impossible to manage. While the high commands were a failure, the strategic command and control potential of the concept remained.

The full potential of the high command as a strategic C<sup>2</sup> echelon was demonstrated by the High Command of Soviet Far Eastern Forces in 1945. This command directed the Soviet Manchurian Campaign against the Japanese Kwantung Army, August 9 to September 2, 1945. The assessment by modern Soviet commentators of this high command, in contrast to the earlier entities, is positive. Marshal Kulikov, for example, notes: "This time [the] experience acquired in the creation of the High Command of the Far Eastern Armed Forces...justified itself."<sup>53/</sup> Similarly a 1975 article commemorating the campaign observed that this high command

as a strategic command agency proved to be highly effective. It made it possible to implement in an efficient and flexible manner the instructions of HQ, SHC [Stavka VGK], to take into consideration all changes in the operational-strategic and military-political situation, to respond to them in a prompt manner, and to give the fronts requisite assistance on the spot.<sup>54/</sup>

What differences account for the successes of this high command in contrast to the previous ones?

A first striking difference evident in the 1945 high command was the quality of the command personnel. With the European war over, the Soviets spared little in staffing the command. The CINC of Soviet Forces, Far East was Marshal Vasilevskiy, longtime Stavka representative and former Chief of the General Staff. To

command and coordinate air force and naval participation, A. M. Novikov (Commander of the Soviet Air Forces) and M. G. Kuznetsov (CINC of the Soviet Navy) were subordinated to him. Other members of the high command included the Deputy Chief of Soviet Signal Troops, the Deputy Commander of Soviet Artillery and the Deputy Chief of Rear Services.<sup>55/</sup>

Structurally the high command did not differ substantially from the previous ones. Marshal Vasilevskiy had three fronts, three air armies, a fleet and a flotilla in subordination. As with the earlier high commands, a subordinate high command of the air forces was created to coordinate and control air support.<sup>56/</sup> Although no explicit evidence has been identified, the histories suggest that Admiral Kuzentsov similarly headed a subordinate high command of the naval forces.<sup>57/</sup> The command structure is portrayed at Figure 4.9.

The most striking difference from previous high commands was the amount of authority vested in the command. Sokolovskiy, in his discussion of strategic C<sup>2</sup>, comments that the High Command of Soviet Far Eastern Forces "was given complete authority and had the needed forces, reserves and all means at its disposal for the successful fulfillment of the missions assigned it."<sup>58/</sup> Similarly Kulikov in his 1975 article observed that this high command had "broad powers."<sup>59/</sup> Even Shtemenko, no admirer of high commands, admits that "the Party and the Government vested great powers in the Commander-in-Chief...."<sup>60/</sup> Implicit in all these statements is the acknowledgement of the relative absence of Stavka/GS direction.

This departure from normal Stavka/GS direction was necessitated first by the "great size and remoteness of this theatre of operations."<sup>61/</sup> Communications with European Russia were particularly sparse. Initially a single 8,300 km long wire paralleling the Trans-Siberian Railroad provided the only landline communications link. Although augmenting bypass lines and a radio relay system

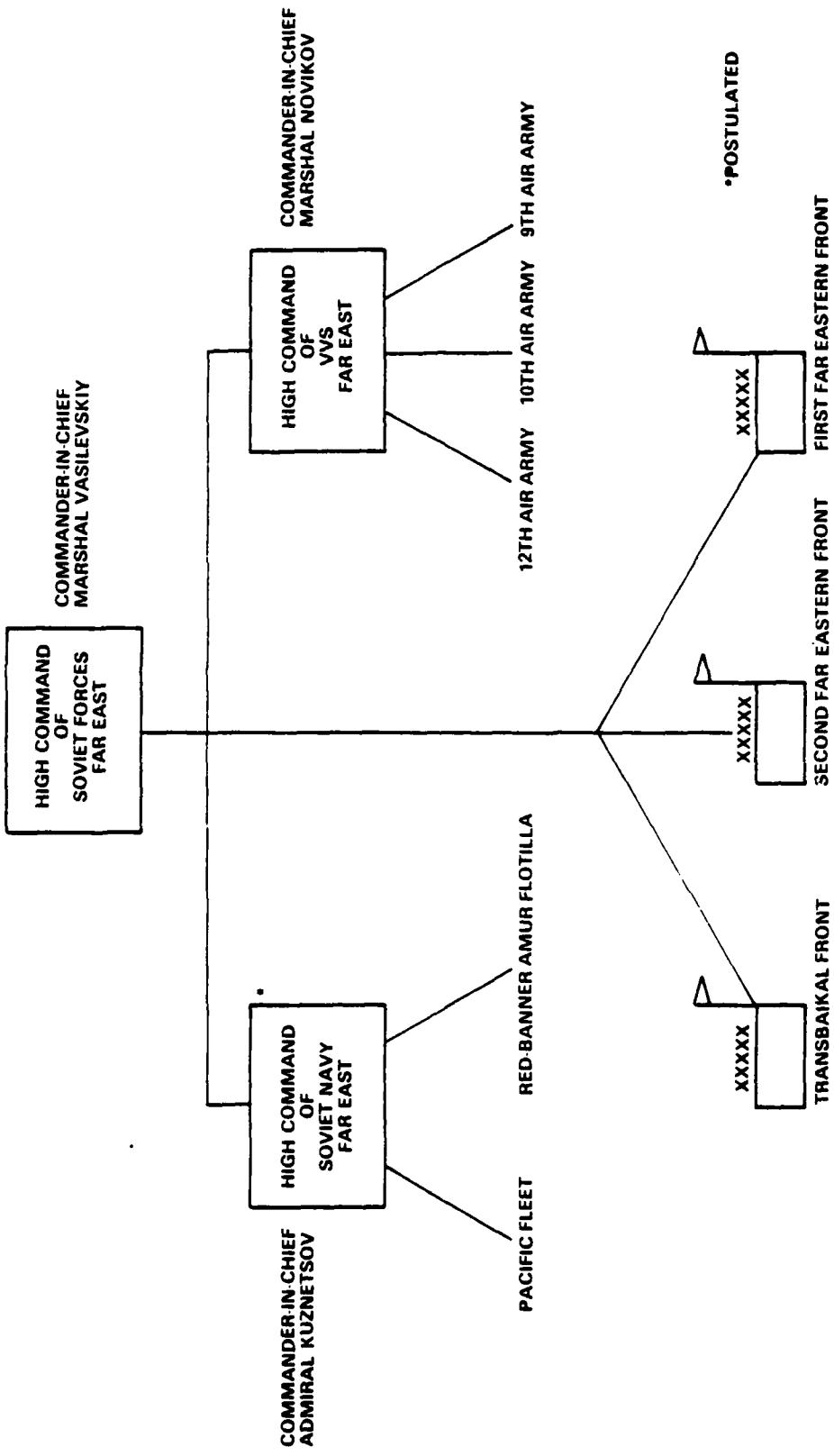


Figure 4.9. Organization of the high command of Soviet Far Eastern Forces.

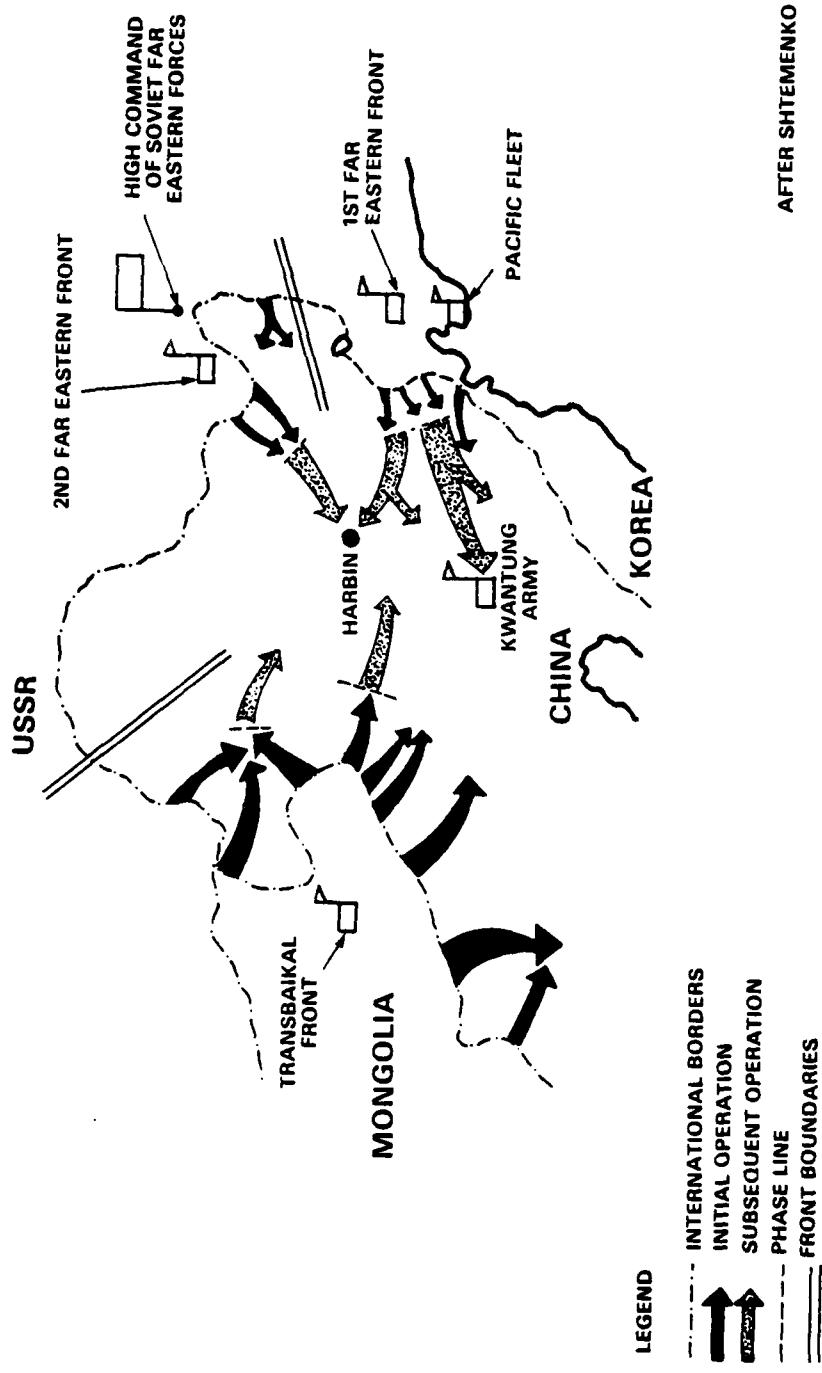
utilizing urban civilian transmitters of the Communications Commissariat were established, the communications lines remained thin threaded. The enormous distances combined with the delays from retransmission made it impossible to provide the timely, high volume information transfer requisite for centralized control.62/

The second factor which necessitated on-site strategic control was the operational scheme of the planned campaign. Shtemenko, Chief of the GS Operations Directorate in 1945, contrasts the Far East plan with the typical operations in the West:

In the West the neighboring fronts had as a rule advanced in parallel, in close contact with one another. In the Far East, owing to the enemy's unusual position, they would have to launch converging attacks from three different directions with the active assistance of the Navy.63/

These operations (Figure 4.10) on three strategic sectors totalling some 5,000 kilometers were too complex to be manageable from Moscow. Although planned by the GS, the campaign's execution direction and control would have to be independent of Moscow.

As a result the high command's CINC had the authority to commit the Second Far Eastern Front when he deemed it opportune.64/ Marshal Vasilevskiy was even in a position to dissuade Stalin from moving the campaign's start date up by 10 days.65/ Other examples were changes by the high command to the basic GS plan which shortened in many cases the estimated length of time required for critical stages of the campaign.66/ Finally, the high command directed a campaign involving three fronts which in 12 days achieved advances of 600-800 kms, airborne operations, and subsequently, landing operations in North Korea, Sakhalin Island and the Kuriles.67/



5736B/79W

Figure 4.10. The plan for the Manchurian Campaign.

It is primarily from the experience of the High Command of Soviet Far Eastern Forces that the utility and significance of the high command should be assessed. From that experience the following conclusions are suggested:

- The high command provides a strategic C<sup>2</sup> option for situations which preclude centralized control.
- The high command is the largest Soviet span of control entity and is responsible for multi-service coordination and direction of the execution of strategic operations.
- All forces involved in a strategic operation are subordinated to it.
- The area of operations of a high command spans a strategic sector or a theater of operations.
- The high command is not a strategic planning entity, although it may modify portions of the GS plan.

#### 4.4.2 The Stavka Representatives

The best known of the intermediary strategic entities were the Stavka representatives or representatives of the Supreme High Command (Hq SHC). These representatives were employed from the very beginning of WW II based on a precedent from the Soviet Civil War. In fact, Stalin himself was such a representative at Tsaritsyn (later renamed Stalingrad) in 1918.<sup>68/</sup> However, the institution did not come into prominence during WW II until 1942.

When the sector high commands were abolished in 1941, direct control of fronts reverted entirely to the Stavka/GS and, as one historian commented, "they encountered considerable difficulties,"<sup>69/</sup> particularly in the coordination of fronts. This situation resulted, according to Marshal Zhukov, the most famous of the Stavka representatives, in "a search for new methods of command and control, which in the final analysis led to an effective form of direct influence of the strategic leadership -- the representatives

of Hq SHC...."70/ From 1942 until the end of the war, this strategic C<sup>2</sup> institution was widely employed.

The purpose of the Stavka representatives was not, until 1944, the actual direction of the fronts. Rather they were a coordinating and assistance agency:

Representatives of HQ SHC [Stavka VGK] were dispatched to battle zones in order to render assistance in organizing and conducting major strategic operations; and to coordinate the actions of fronts and fleets which were engaged in executing a common strategic mission.71/

They did not, like the CINC of the high command, have any legitimate command authority over the front commanders.72/ In fact "there were no formal provisions concerning the rights and responsibilities of representatives of Hq SHC."73/

It was though quite explicit what Stalin considered was their accountability. The oft quoted message of 8 May 1942 from Stalin to L. C. Meklis, a Stavka representative at the Crimean front, is illuminating:

You have taken the strange position of a casual observer, who is not responsible for the problems of the Crimean front....On the Crimean front you are not an observer on the sidelines, but rather a responsible representative of Hq SHC. You are answerable for all the successes and failures of the front, and you are responsible for correcting the mistakes of the commander on the spot.... If, as you say, "the situation indicated that the enemy would attack in the morning," and you did not take all measures to organize resistance but rather limited yourself to passive criticism, then all the worse to you.74/

This combination of lack of statutory authority and full accountability to Stalin made the actual strategic C<sup>2</sup> performance of the representatives varied. Strong willed individuals such as Zhukov used their positions to its fullest potential and frequently in

effect commanded. Others focused more on giving assistance and organizing multi-front/service coordination.

Due to the popular writings of Marshal Zhukov and Vasilevskiy, the impression has been created that only infantrymen served as Stavka representatives. This is inaccurate. The Stavka representatives included during the course of the war the entire range of military leaders including the commanders/chiefs of navy, air force, artillery, armor, long range aviation and communications. For example, Stalin personally ordered Peresypkin, Chief of Communications Troops, on 17 December 1943, to go to the first Ukrainian Front to investigate the unsatisfactory communications of that front's 1st Guards Army.<sup>75/</sup> Other representatives included political leaders, like Meklis, and front commanders acting simultaneously in both roles.<sup>76/</sup>

These representatives were frequently organized as operations groups under the senior Stavka representative. When Marshal Zhukov was sent to the North Caucasian Front in April 1943, with him were the Commander-in-Chief of the Soviet Navy (Kuznetsov), the Commander of the Air Force (Novikov) and the responsible General Staff Operations Directorate Branch Chief (Shtemenko). One activity of this group was the organization of support by naval and air units for the army's assault landing.<sup>77/</sup> Similarly, Marshal Vasilevskiy had an operations group which during varying periods included the Chief of the GS Operations Directorate, the Commander of the Air Force, the Chief of Armored Troops and the Chief of Artillery Troops.<sup>78/</sup>

These representatives and operations groups were supported in the field by assigned communications units. Marshal Vasilevskiy's communications support was provided by "a permanently assigned independent communications division of the RGK [Reserve of

the High Command]." This unit was responsible for providing dedicated communications to the General Staff, the fronts in which the representative was working, neighboring fronts, and, occasionally, to army level.<sup>79/</sup>

The Stavka representatives were used on an ad hoc basis. There was no uniform deployment of representatives among the fronts. Instead, they "were dispatched only to those fronts or groups where major missions were being executed, missions which would determine the course of the most important operations or campaigns."<sup>80/</sup> For example, both Marshals Zhukov and Vasilevskiy were sent to the fronts involved in the Battle of Kursk. Zhukov was responsible for the coordination of the Central, Bryansk and Western Fronts and Vasilevskiy was responsible for the Voronezh Front (Figure 4.11).<sup>81/</sup>

The activities of a Stavka representative are typified in the pre-Kursk battle, May 22, 1943 message from Zhukov, at the critical Central Front, to Stalin:

The defences of the 48th Army are thin, with insufficient or low artillery density, and if the enemy strikes at Romanenko's\* army with the idea of by-passing Maloarkhangelsk from the east in order to envelop Kostin's\* main grouping, Romanenko will be unable to withstand the enemy's blow. The reserves of the Front are located chiefly behind Pukhov\* and Galinon\* and will not be able to come to Romanenko's assistance in time.

---

\* Soviet units during WW II were frequently referred to by either their commander's real or code name. Romanenko was commander of the 48th Army; Kostin was the codename for General Rokossovskiy, commander of the Central Front; Pukhov was commander of the 13th Army; and Galanin commanded the 70th Army. Since the message was to Stalin and without elaboration, it also illustrates Stalin's retention of details.

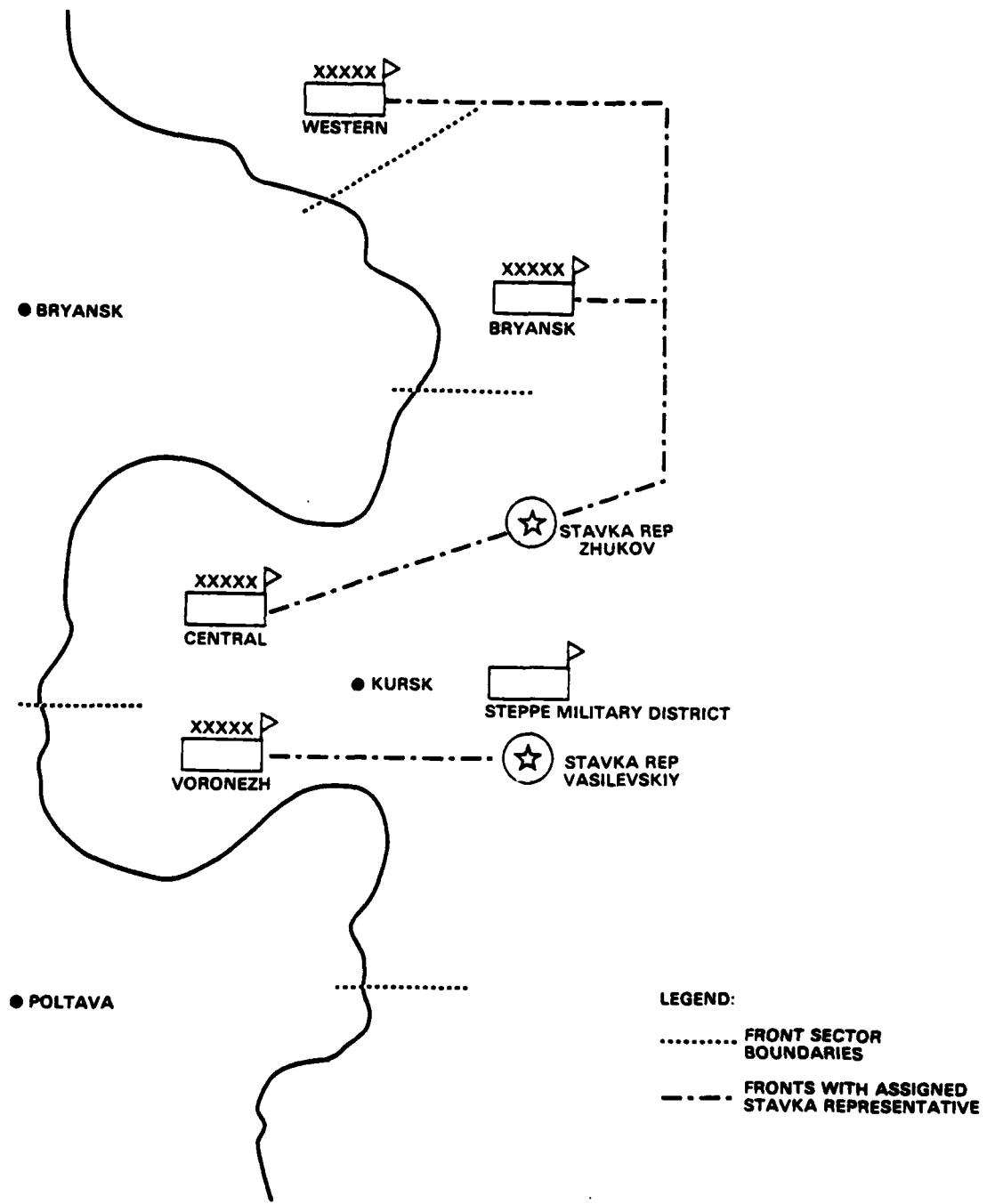


Figure 4.11. Assignment of Stavka representatives prior to the Battle of Kursk.

I consider that Romanenko should be reinforced from the GHQ reserve with two infantry divisions, three T-34 tank regiments, two anti-tank regiments and two mortar or artillery regiments of the GHQ reserve. If this is provided, Romanenko will be able to organize a stable defence and, when necessary, go over to the offensive as a fairly concentrated force.82/

Further in the same message,

...Kostin's preparations for the offensive have not been completed. Having discussed this question on the spot, Kostin, Pukhov and I came to the conclusion that it was necessary to move the penetration area 2-3 kilometres west of the area chosen by Kostin, i.e., to Arkhangelskoye inclusive, and to put in the first echelon a reinforced corps with a tank corps west of the railway.83/

The above quotations explicitly illustrate the primary functions of the Stavka representatives -- coordination/assistance and correction of errors. The representatives served as field inspectors insuring that the Stavka/GS planned operations were correctly and adequately implemented by the fronts. Illustrated above is the additional, invaluable function of their acting as an unbiased agent in determining a front's reinforcement requirements. These representatives could not only determine exactly what was needed but where. Thus they at the same time validated a front's needs and insured that the reinforcements would not be maldeployed.

In July 1944 a significant change occurred to the powers of the Stavka representative. During a Stavka conference to discuss operations in the Baltic and Poland, Marshal Zhukov proposed that the primary Stavka representatives be given the formal right to

control fronts. The proposition was accepted. On 29 July, the Stavka issued the following directive:

The Headquarters, Supreme High Command orders that Deputy Supreme Commander Mar SU Zhukov be responsible not only for coordinating, but of directing operations conducted by troops of the 1st Ukrainian Front, the 1st Belorussian Front and the 2nd Belorussian Front.<sup>84/</sup>

Marshal Vasilevskiy was similarly given control of the neighboring 2nd Baltic, 1st Baltic and 3rd Belorussian Fronts. In effect this arrangement brought under a single commander the major forces in the Northwestern Strategic Sector and the forces in the Western Strategic Sector under another (Figure 4.12). Although a formal command was not created (e.g., a high command), both Zhukov and Vasilevskiy functioned as commanders-in-chief for their respective sectors.

The last significant change occurred in early 1945. On Stalin's initiative a review was conducted to determine the feasibility of eliminating the representatives and directing the fronts completely from the Stavka/GS. Zhukov opined that total centralized control was possible in view of the experience of the front commanders and staffs. The General Staff however demurred. A compromise was arrived at in which the Stavka representatives would be retained for the Northwestern and Southwestern Strategic Sectors while the Stavka/GS would directly control the forces of the Western Strategic Sector. As a result the Battle of Berlin was directed completely by Stalin and the GS from Moscow.<sup>85/</sup>

The institution of the Stavka representative was an important segment of the Soviet strategic C<sup>2</sup> structure during WW II. It provided the Stavka/GS an executive agent at the fronts to

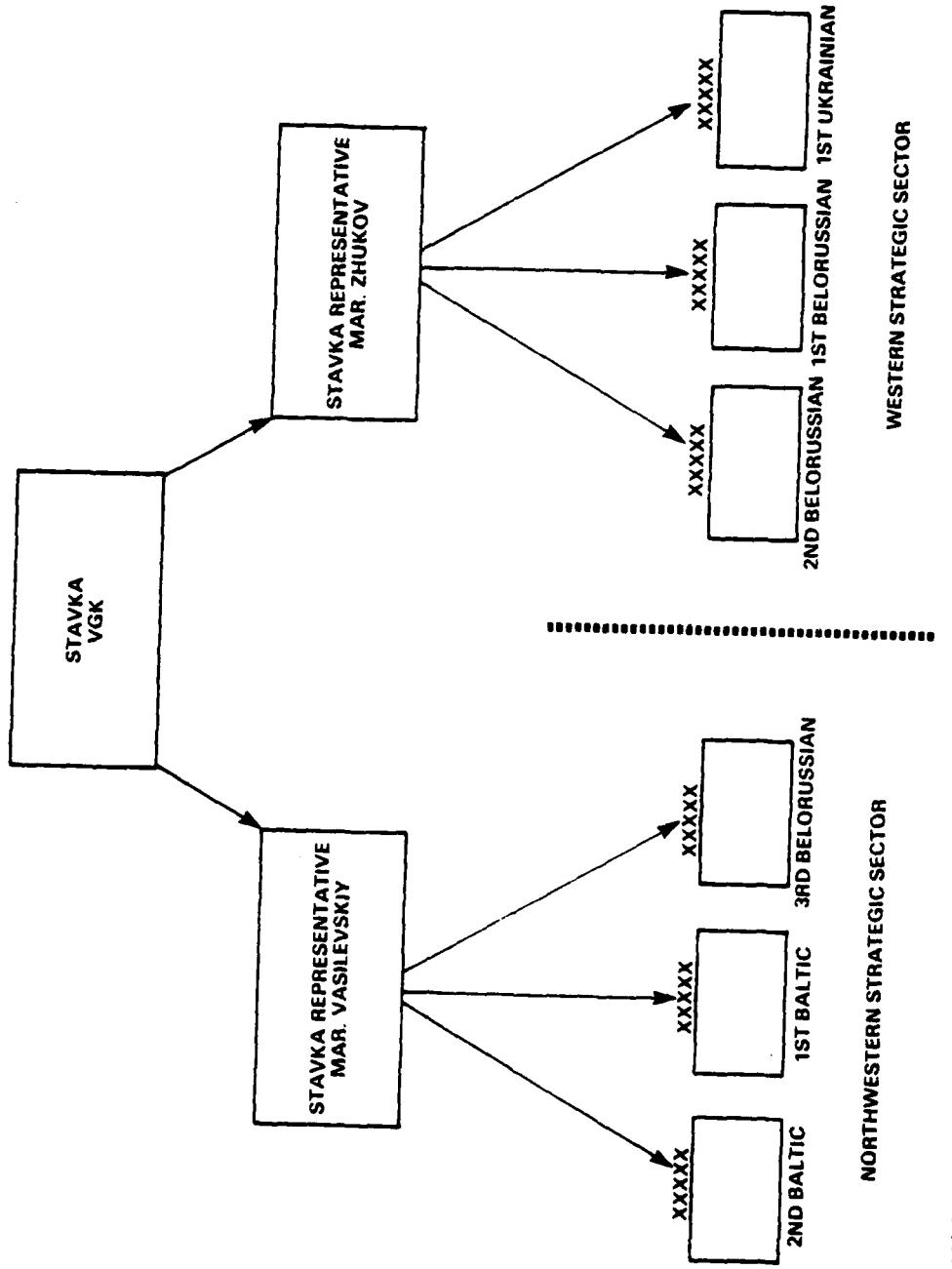


Figure 4.12. Strategic C<sup>2</sup> of Northwestern and Western Strategic Sectors-  
29 July 1944.

5736B/79W

provide required assistance and coordination. The necessity for coordination was paramount due to the front commanders' myopia, succinctly described by Shtemenko:

It was also known...that the [front] commanders in chief thought primarily of their own front[s] and were not particularly inclined to take their neighbor into consideration under the assumption that he himself would manage.<sup>86/</sup>

By dispatching the representatives to the most critical parts of the Soviet-German Front, the Stavka/GS had a powerful means to insure that front plans correctly conformed to the requirements of the strategic plan. These representatives could also verify the manpower and materiel requirements of the fronts and notify the strategic C<sup>2</sup> leadership directly of immediate requirements. In these capacities they were a positive contribution to the successful strategic C<sup>2</sup> of Soviet forces during WW II.

Yet the institution had potentially serious deficiencies. The failure to specifically delineate the representative's authority and responsibilities vis-à-vis the front commanders prior to 1944 allowed arbitrariness by some representatives. Zhukov for example often transitioned to the role of director/commander but his was a successful record. Others, less militarily competent but equally assertive (e.g., Meklis), were detrimental to efficient strategic C<sup>2</sup>. This aspect of the institution is recognized by the Soviets:

A noteworthy deficiency in the work of some representatives of Hq SHC was the fact that sometimes they unjustifiably interfered in the actions of front commanders, hindering them and disrupting their initiative to a certain degree.<sup>87/</sup>

To the battle tested front commanders of 1944 and 1945, the appearance of a Stavka representative at their headquarters was undoubtedly not a completely welcome sight.

SECTION 4  
NOTES

1. "Front," DICTIONARY OF BASIC MILITARY TERMS, p. 230
2. R. Portugal'skiy and N. Fomin, "Certain Questions on Improving the Structure of Command and Control Bodies of the Front and Army, VOENNO-ISTORICHESKIJ ZHURNAL [hereafter VIZ], No. 8, Aug. 1978, trans. JPRS, in TRANSLATIONS ON USSR MILITARY AFFAIRS [hereafter TUMA], No. 1391 (30 Oct. 1978), p. 145, n. 3. This is an excellent study on the composition of front and army staffs.
3. S. M. Shtemenko, GENERAL'NYJ SHTAB V VODY VOJNY KNIGA VTORAYA [THE GENERAL STAFF IN THE WAR YEARS] (Moscow: 1973), trans. JPRS 65733-1 and 65733-2, p. 8. Hereafter BOOK TWO
4. See for example A. Pokrovskiy, "Memoirs: On the Southwest Sector (July-September 1941)," VIZ, No. 4, Apr. 1978, trans JPRS, in TUMA, No. 1360 (3 Jul. 1978), p. 46.
5. "Glavonokomanduyushchij," SOVETSKAYA VOENNAYA EHNTSIKLOPEDIYA (SOVIET MILITARY ENCYCLOPEDIA), II, p. 564. Hereafter cited as EHNTSIKLOPEDIYA.
6. See John Erickson, THE ROAD TO STALINGRAD, p. 71, for the sector widths.
7. A. Vasilevskiy, "During Those Grim Years," VIZ, No. 2, Feb. 1978, trans. JPRS, in TUMA, No. 1344 (7 Apr. 1978), p. 76.
8. G. K. Zhukov, THE MEMOIRS OF MARSHAL ZHUKOV, p. 238. The members of the Stavka, High Command included Commissar for Defense S. K. Timoshenko (Chairman), Chief of General Staff G. K. Zhukov, J. V. Stalin, V. M. Molotov, Marshals K. Ye Voroshilov and S. M. Budennyy, and People's Commissar for the Navy, Admiral N. G. Kuznetsov.
9. A. Vasilevskiy, "A Life Dedicated to Serving the Motherland," NARODNAYA ARMIYA, 30 Sept. 1975, trans. JPRS, in TUMA, No. 1193 (28 Oct 1975), p. 11.

10. A. M. Vasilevskiy, "The Command Post of the War," KOMSOMOLSKAYA PRAVDA, 30 Apr. 1975, trans. JPRS, in TUMA, No. 1143 (16 May 1975), p. 32.
11. V. Danilov, "From the RKKA Staff to the General Staff of the Workers' and Peasants' Red Army (1924-1935)," VIZ, No. 8, Aug. 1978, trans. JPRS, in TUMA No. 1392 (2 Nov. 1978), p. 18.
12. See S. M. Shtemenko, THE SOVIET GENERAL STAFF AT WAR: 1941-1945, pp. 26-51. For the transfer of personnel to the western sector branches see p. 33. Hereafter cited as BOOK ONE.
13. S. M. Shtemenko, BOOK ONE, p. 35.
14. See for example I. Kulikov, "Ofitsery-Predstavitel' General'nog Shtabo v Oboronitel'nom Srazhenii Pod Kurskom", (Officer Representatives of the General Staff in the Kursk Defensive Engagement) VIZ, No. 8, Aug. 1976, p. 81, which mentions a Col Ya. A. Kutsev as the "chief of sector of the Veronezh front." Shtemenko, BOOK TWO, p. 275, also mentions a "chief of axis (or sector)" of the Northern Front.
15. A. Vasilevskiy, "Victory in the Far East," [Hereafter "Victory"] VIZ, No. 8-9, Aug-Sep. 1970, trans. JPRS, TUMA, No. 654 (4 Nov. 1970), pp. 35-36 and Shtemenko, BOOK ONE, p. 316
16. V. Kulikov, "Strategic Leadership of the Armed Forces," VIZ, No. 6, Jun. 1975, trans. JPRS in TUMA, No. 1160 (8 Jul. 1975), p. 42. Hereafter "Strategic Leadership."
17. V. P. Morozov, "Some Questions on the Organization of Strategic Leadership in the Great Patriotic War," ISTORIYA SSR, No. 3, May-Jun. 1975, trans. JPRS, in TUMA, No. 1164 (21 Jul. 1975), p. 33.
18. The last change of membership occurred on February 17, 1945. The members were I. V. Stalin, G. K. Zhukov, A. M. Vasilevskiy, N. A. Bulganin, N. G. Kuznetsov and A. I. Antonov. Morozov, p. 36.
19. Andrei Grechko, BATTLE FOR THE CAUCASUS, p. 78.
20. Morozov, pp. 37-38.
21. N. N. Popel', V. S. Savel'yev and P. V. Shemanskiy, TROOP CONTROL DURING THE GREAT PATRIOTIC WAR, trans. JPRS 64920 (4 Jun. 1975), p. 69.

22. See *Ibid.*, pp. 69-71, for a discussion of these changes in functions.
23. I. T. Peresypkin, *COMMUNICATIONS IN THE GREAT PATRIOTIC WAR*, p. 70.
24. *Ibid.*, p. 73.
25. Zhukov, p. 281.
26. Popel', Savel'yev and Shemanskiy, p. 70.
27. G. Mikhaylovskiy and I. Vydrov, "Development of Supreme Leadership Entities for Conduct of War," *VIZ*, No. 4, Apr. 1978, trans. *JPRS*, in *TUMA*, No. 1360 (3 Jul. 1978), p. 34.
28. Roy A. Medveyev, *LET HISTORY JUDGE*, p. 213.
29. *Ibid.*, p. 214.
30. Popel', Savel'yev and Shemanskiy, p. 17.
31. Shtemenko, *BOOK TWO*, p. 215.
32. *Ibid.*
33. A. Pokrovskiy, p. 39.
34. "Glavnoe Komandovanie," *SOVETSKAYA VOENNAYA EHNTSIKLOPEDIYA* [Hereafter *EHNTSIKLOPEDIYA*], II, p. 562.
35. "Glavnokomanduyusnchij," *EHNTSIKLOPEDIYA*, II, p. 564.
36. "Glavnoe Komandovanie," *EHNTSIKLOPEDIYA*, II, p. 562.
37. *Ibid.*
38. Kulikov, "Strategic Leadership," p. 44.
39. Shtemenko, *BOOK ONE*, p. 41.

40. Morozov wrote in a 1975 article that the high commands were formed by the State Defense Council in an attempt "to avoid repeating the mistakes made by Hq SHC at the beginning of the war as a result of imperfections in the system of command and control; and to simplify for it the leadership of military actions after the Soviet Armed Forces were forced to take up the strategic defensive." Morozov, pp. 39-40.
41. Ibid, p. 40.
42. Erickson, p. 172.
43. Pokrovskiy, p. 40.
44. A. Silant'ev, "Upravlenie Aviatsiej v Nastupetal'nykh Dejstviyakh Vojsk (Control of Aviation in Offensive Operations)," VIZ, No. 4, Apr. 1976, p. 31.
45. Pokrovskiy, pp. 43-46. Morozov, p. 40, also mentions the use of local civilian resources as a function of the high commands.
46. Pokrovskiy, p. 46.
47. Shtemenko, BOOK ONE, p. 35.
48. Pokrovskiy, p. 49. Pokrovskiy, at that time the Chief of Staff of the Southwestern Sector High Command, writes, "As soon as the content of the front's petition and the GHQ answer to it became known, the CIC [CINC] immediately sent a message to the GHQ...."
49. This conversation is quoted in Zhukov, pp. 298-300. Kirponos wasn't a direct recipient of the Southwestern Sector CINC's message either as evidenced by Stalin's quoting parts of it to him.
50. Pokrovskiy, p. 50.
51. Erickson, p. 209.
52. Zhukov, p. 280.
53. Kulikov, "Strategic Leadership," p. 45.
54. Aleksander M. Vasilevskiy, "Route of the Kwantung Army," VIZ, No. 8 (1975), trans. JPRS, in TUMA, No. 1189 (14 Oct. 1975), p. 51.

55. Ibid.
56. Silant'ev, p. 31.
57. V. Maslov, "Combat Operations of the Pacific Fleet," VIZ, No. 8 (1975), trans. JPRS, in TUMA, No. 1189 (14 Oct. 1975), p. 62: "All land and naval forces concentrated against Japan were unified into a single organization -- the armed forces of the Far East, with Mar SU M. A. Vasilevskiy designated commander-in-chief. Coordination of operations of the Pacific Fleet and Red-Banner Amur Flotilla with ground forces was handled by People's Commissar of the Navy Flt Adm N. G. Kuznetsov, commander-in-chief of the Navy."
58. Sokolovskiy, p. 357.
59. Kulikov, "Strategic Leadership," p. 45.
60. Shtemenko, BOOK ONE, p. 339.
61. Ibid.
62. See I. Peresypkin, "Communications in the Manchurian Operation," VIZ, No. 10 (1975), trans. JPRS, in TUMA, No. 1203 (2 Dec. 1975), pp. 38-39.
63. Shtemenko, BOOK ONE, p. 339.
64. Vasilevskiy, "Victory," p. 41.
65. Vasilevskiy, "The Campaign in the Far East," VIZ, No. 10 (1975), trans. JPRS, in TUMA, No. 1203 (2 Dec. 1975), p. 29. Presumably this inquiry from Stalin was a result of Truman informing him at Potsdam that the U.S. had developed a new, extremely powerful weapon (the atom bomb).
66. Vasilevskiy, "Victory," p. 40.
67. I. Krupchenko, "Some Features of Soviet Military Art," VIZ, No. 8 (1975), trans. JPRS, in TUMA, No. 1183 (29 Sep 1975), pp. 84-85 for information on the landings.
68. See Medvedev, pp. 12-15, for his activities. See also Morozov, p. 41, for a quote of Zhukov acknowledging the WW I precedent.

69. Morozov, p. 40.
70. Quoted in Ibid., pp. 40-41.
71. Ibid., p. 41.
72. Shtemenko, BOOK ONE, p. 339.
73. Morozov, p. 43.
74. Quoted in Ibid., p. 44. For a slightly different translation see Shtemenko, BOOK ONE, p. 55.
75. Peresypkin, COMMUNICATIONS IN THE GREAT PATRIOTIC WAR, p. 169. Pages 166-187 describe his missions as a Stavka representative, providing an excellent account of the work of this technical Stavka representative.
76. Morozov, pp. 42-43.
77. Zhukov, p. 440.
78. Peresypkin, COMMUNICATIONS IN THE GREAT PATRIOTIC WAR, p. 180.
79. Ibid.
80. Zhukov, quoted in Morozov, p. 41.
81. G. Zhukov, "In the Kursk Bulge," THE BATTLE OF KURSK, ed. Ivan Parotkin, p. 40.
82. Ibid., p. 37.
83. Ibid., p. 38.
84. Shtemenko, BOOK TWO, p. 56.
85. Ibid., pp. 25-26.
86. Ibid., p. 56.
87. Morozov, p. 47. See also Shtemenko, BOOK TWO, p. 56.

## SECTION 5

### MODERN STRATEGIC COMMAND AND CONTROL

#### 5.1 INTRODUCTION.

This chapter discusses the applicability of Soviet WW II geo-strategic concepts and strategic C<sup>2</sup> entities to modern nuclear conflict. Changes and modifications to these entities as evidenced in modern Soviet writings are indicated.

#### 5.2 THE GEO-STRATEGIC CONSTRUCTS.

There is little doubt that the Soviets have retained the geo-strategic concepts of the theater of operations and the strategic sector. The TVD still retains its importance as the basis for ground force deployment. It remains the place de guerre for them. Similarly the concept of the strategic sector as that subdivision of the TVD which provides the avenue to the strategically vital centers is not obsolete. The impact of geography upon the operations of motorized and armored forces has not entirely lost its significance. Current Soviet ground force dispositions probably reflect these TVDs and strategic sectors.

There is a tenuous indication that the WW II strategic sectors are now considered TVDs. V. P. Morozov's 1975 article on WW II strategic leadership specifically stated that the high commands of 1941 were "in the strategic theaters of operations--the Northwest, the West and the Southwest."<sup>1/</sup> As shown earlier these strategic sectors were frequently called TVDs colloquially but never specifically in association with the high commands. Of course Morozov's attribution could be dismissed as a simple historian's error. However, Morozov, in 1974, was the head of the Department of History of the Great Patriotic War at the Institute of Military History.<sup>2/</sup> Thus it is highly improbable that he would have made such a fundamental mistake. Rather he may have, for this article's

civilian audience, characterized the WW II strategic sectors as they are understood currently -- TVDs.

If this supposition is true then the current Western TVD is the area encompassed by the WW II Western Strategic Sector. That is the area bounded by the Baltic in the north and the Carpathian-Alps ridgeline to the south (Figure 5-1). Similarly, within that TVD, the FRG/DDR border would constitute at least one strategic sector (Figure 5.2). The shortest, most advantageous avenue to NATO's major military/industrial/political centers is from that sector. Given the importance to NATO of the Central Region, this strategic sector is probably also the most important in Soviet planning. Soviet ground force deployment in Europe also suggests this.

The importance of these geo-strategic concepts should not be over emphasized. Since they are merely the geographic sectors of strategic importance, at best they signal in what areas the Soviets have strategic military interests. As was shown in Chapter 2 these interests have changed little in Russia's modern history. Soviet current force disposition continues to reflect this historical legacy. In summary, the regional disposition of Soviet forces is a fact that does not change by semantical characterizations such as Military District, TVD or Strategic Sector.

### 5.3 MODERN STRATEGIC COMMAND AND CONTROL.

#### 5.3.1 Stavka/General Staff.

Modern Soviet military authors consistently concur that in a future conflict, Soviet strategic C<sup>2</sup> will again be centralized in the Stavka/GS. This has been a permanent feature of Soviet commentaries on strategic C<sup>2</sup> since the end of WW II. The best known of these expositions has been the contribution of Marshal Sokolovskiy. Sokolovskiy, in all three editions of SOVIET MILITARY STRATEGY,

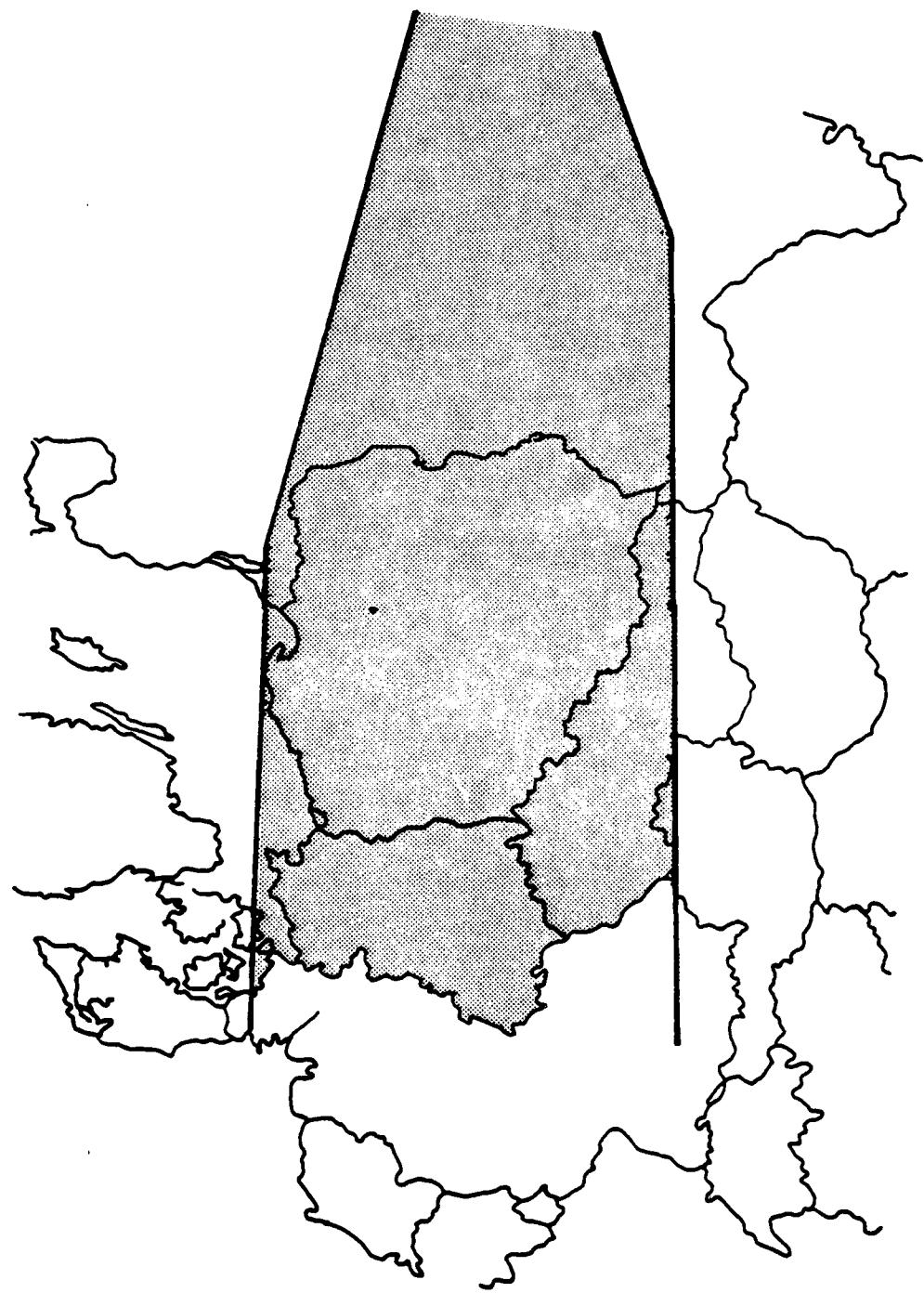


Figure 5.1. Possible present Western theater of operations.

5736B/79W

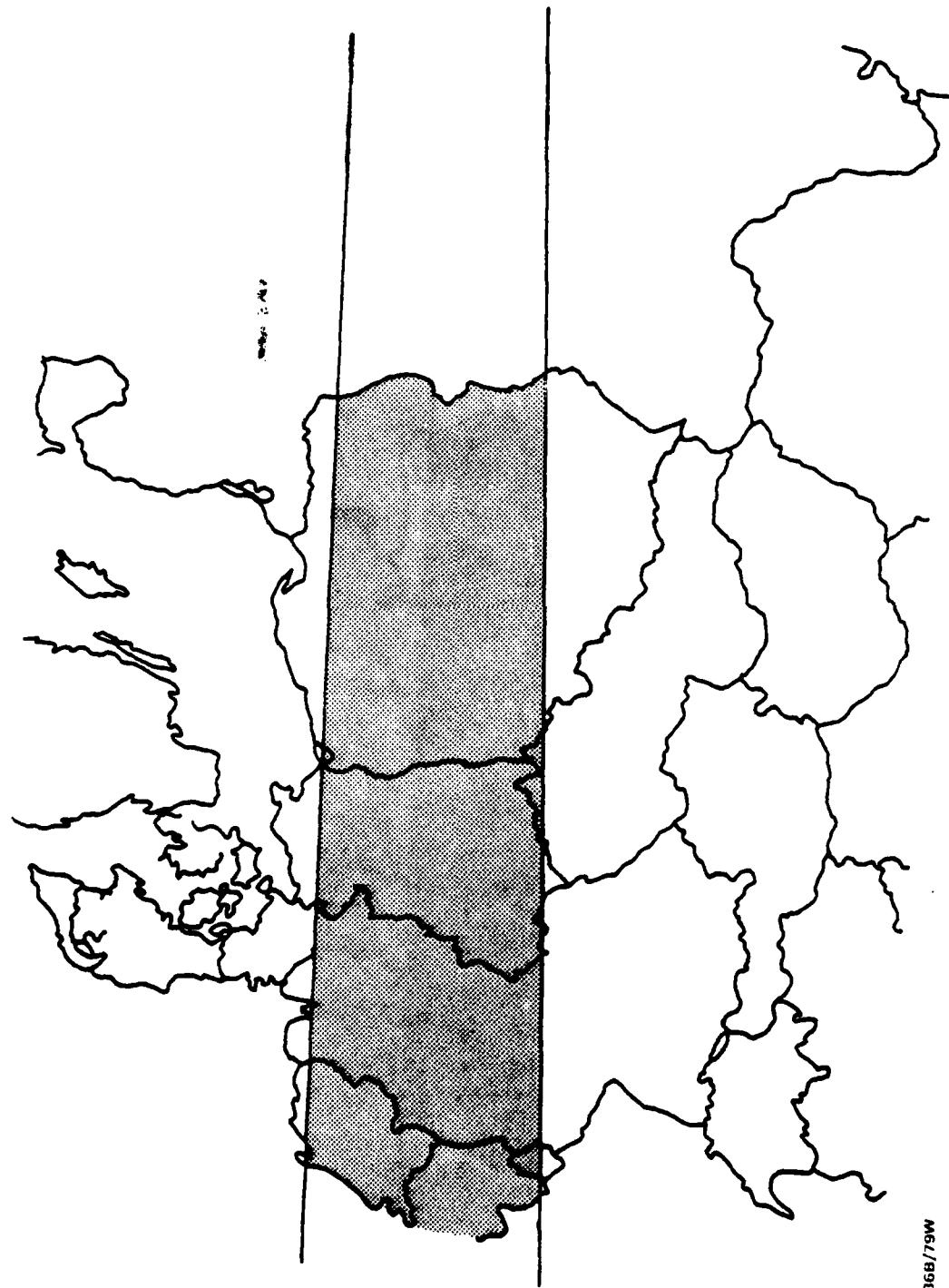


Figure 5.2. Possible present strategic sector in Western TVD.

categorically states that strategic C<sup>2</sup> "will obviously be accomplished, as before, by the Stavka of the Supreme High Command." Further, that "the General Staff will be the main agency of the Stavka of the Supreme High Command.<sup>3/</sup> Similarly, Colonel Skirdo in THE PEOPLE, THE ARMY, AND THE COMMANDER, wrote, "Direct leadership of the Armed Forces both in peacetime and in war is exercised by the Supreme High Command, the General Staff, and appropriate commanding officers."<sup>4/</sup>

Obvious changes have occurred though in the nature of these entities. This is particularly true of the Stavka, VGK. As was pointed out earlier, modern Soviet histories portray the WW II Stavka as a form of collective leadership when in fact it was a legitimization of Stalin's military diktat. This portrayal may indicate that the modern Stavka will be a true collective decision making body. Skirdo, for example, wrote, "Collective leadership in armed struggle during a nuclear missile war has become an objective necessity."<sup>5/</sup> Additionally the current emphasis on the role of the party in WW II histories suggests a more active participation of the political leadership in the Stavka.<sup>6/</sup>

Significant changes have apparently also occurred to the General Staff. The most significant is the stress on the subordination of all Soviet forces to its control during war. Sokolovskiy was very explicit on this point:

In contrast to the conditions of the last war, under which the structure of the General Staff was constructed to provide leadership of military actions mainly of the Ground Troops, under modern conditions the General Staff must ensure leadership of all services of the Armed Forces, especially, the Rocket Troops and National PVO troops.<sup>7/</sup>

Colonel Skirdo echoes this leading role of the General Staff over all the Armed Forces.<sup>8/</sup> The centralization of strategic planning in the GS will thus continue and now include the entire Soviet armed forces.

Equally significant, if true, is John Erickson's supposition that the Operations Directorate of the General Staff is again organized by branches. In a 1976 article he wrote that the Operations Directorate is organized into six "operational branches" -- Northern, Western, Balkan, Near Eastern, Central Asian and Far Eastern.<sup>9/</sup> Although Erickson provides no source for this statement and Soviet authors are singularly silent on the current Operations Directorate organization, the supposition is tenable. As noted previously, the Operations Directorate was organized by branches prior to WW II and some branches (e.g. Mideast) existed throughout the war. Only the necessity for improved C<sup>2</sup> of fronts on the Soviet German Front caused the General Staff to depart from this structure. A return to the "normal" peacetime organization is not entirely unexpected. However, this has significant strategic C<sup>2</sup> implications to be discussed in 4.3.2.1.

Lastly several authors suggest that the wartime strategic C<sup>2</sup> structure must function in peacetime. As quoted above, Colonel Skirdo specified both a peace and wartime Stavka/GS leadership. While other authors are not as explicit, the necessity for at least peacetime practice of these entities is recognized. Successful strategic C<sup>2</sup> under a nuclear attack precludes any lengthy conversion to a war C<sup>2</sup> structure. The Soviet dictum of combat readiness is equally applicable to organs of strategic C<sup>2</sup>. Kulikov clearly implies this:

[O]ne of the lessons of the war consists of the fact that the system of strategic leadership

must be thought out, worked out, and coordinated in all details ahead of time, before the start of a war.10/

In conclusion it is probable that the Soviets intend to provide centralized strategic C<sup>2</sup> to include planning with the same Stavka/GS combination used during WW II. The General Staff's role in strategic planning and control of execution has increased to encompass all arms and branches of the service. These organs are probably exercised with some frequency to preclude the difficulties in strategic C<sup>2</sup> experienced during the first weeks of WW II.

### 5.3.2 Intermediary Strategic C<sup>2</sup> Entities.

As demonstrated in Section 3, the Soviets during WW II required intermediary strategic C<sup>2</sup> entities. True, strategic operations were planned at Moscow and the implementing directives emanated from there. But throughout the war a means to effect and coordinate implementation was a necessity at the critical sectors of the FEBA. With the passing of the generation of experienced WW II field commanders, it is highly unlikely that this necessity has disappeared.

5.3.2.1 The High Commands. Of the intermediary C<sup>2</sup> options available to the Soviets, the high command is the most likely to be employed in a modern conflict. Several authors have so indicated. Marshal Kulikov, while still Chief of the General Staff, wrote that the high commands, in a future war, could "apparently find some application."11/ In contrast, he proposed no such applicability for the Stavka representatives.12/

'The most explicit endorsement of the current utility of high commands is found in Colonel Skirdo's 1970 book, THE PEOPLE, THE ARMY, THE COMMANDER:

Under present day conditions organs of strategic leadership must operate in an extremely

efficient and coordinated manner. But this is possible only if there is strict centralization of control. On this point, it is probable that during the course of a nuclear missile war it may be necessary to create main commands for leadership of armed struggle in the separate theaters. This will be required by the enormous spatial scope of a nuclear missile war and the unprecedented complexity of leadership in combat operations. [emphasis added]13/

Skirdo's endorsement additionally indicates a preference for high commands of theaters (e.g., 1945) rather than high commands of strategic sectors. Kulikov's article also supports this. He noted that the high commands "will not always be represented in a form such as command[s] of directions [sectors] of theaters of military operations."14/

This last indication that the high command may be employed is the fact that two Soviet field commanders currently hold the formal title of "Commander-in-Chief." These are Marshal Kulikov, by virtue of his Warsaw Pact position, and General Ivanovskiy, commander of Group Soviet Forces, Germany.15/ The CINC (Glavkom) is the highest military position within a strategic sector or theater of military operations and the commander of the high command if one is created.

If the GS Operations Directorate is organized as Erickson stated, the above would suggest that the Soviets have retained the historical one-to-one strategic C<sup>2</sup> scheme (Figure 5.3). Two alternatives are possible based on two field CINCs (Glavkom) in the European area. One, the Soviets for the western theater of operations will create two high commands, one being a special subordinate high command for the critical strategic sector (e.g., FRG/DDR border). This alternative would however represent a significant

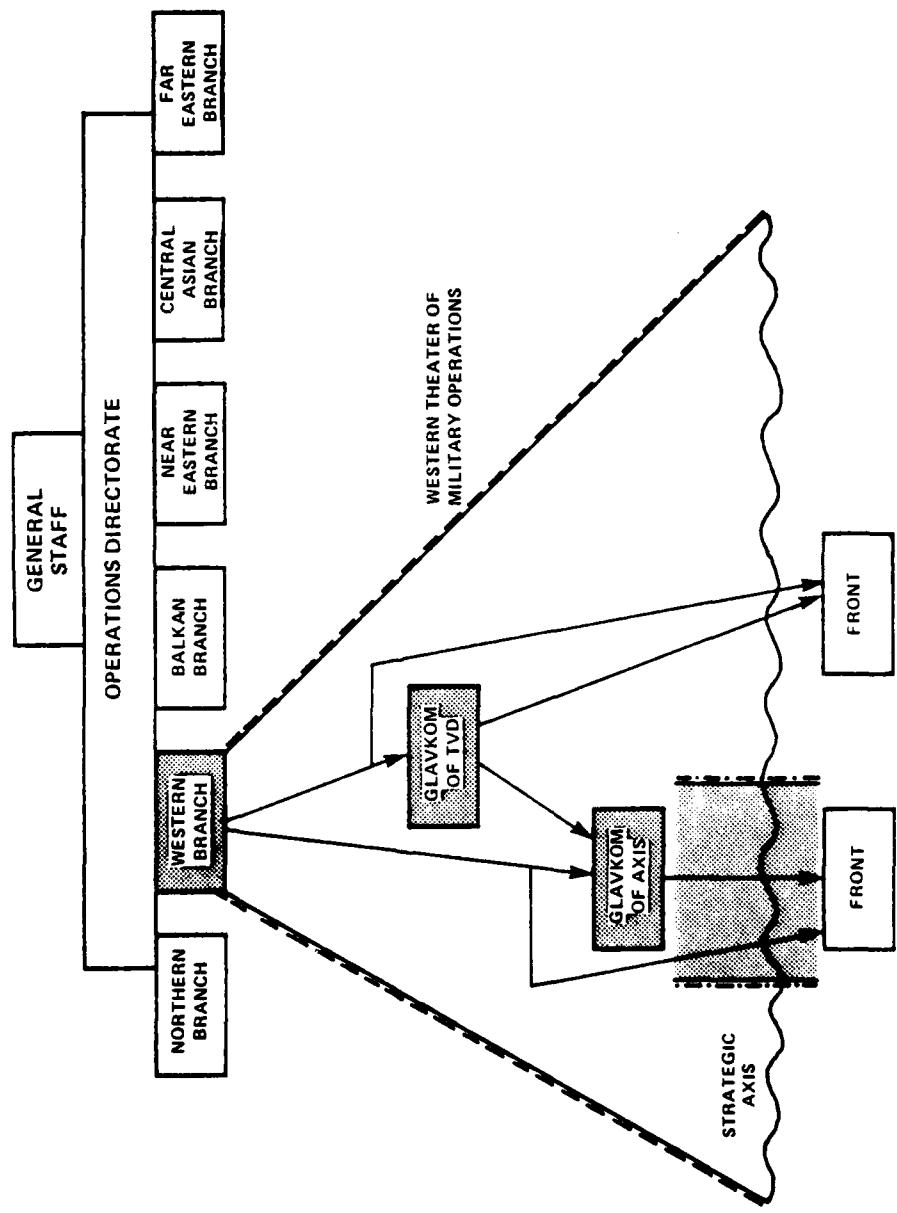


Figure 5.3. Possible current Soviet strategic C<sup>2</sup> scheme.

5736B/79W

departure from the Soviet historical experience. As such this alternative is tenuous.

The second alternative is more solidly based on the WW II experience. The Soviets will create a high command of the forces within the western TVD with a subordinate senior commander (Glavkom) responsible for execution of operations within the strategic sector. As discussed in Chapter 3, in 1944 there were such commanders for the Northwestern and Western Strategic Sectors. These commanders, responsible for execution and coordination control, did not have a formal command establishment such as a staff.

The modern significance of the high command is that of a possible arbitrator of extra-front resources. Since the high command by definition commands all the forces assigned to its area of operations, it is the logical focal point of Naval, non-frontal Air Force and possibly SRF support. This would permit the General Staff to allocate these resources, in accordance with the strategic plan, to the high commands (i.e., one-to-one). In turn the high commands would suballocate to the fronts. Such an arrangement is particularly persuasive for a two-front war (Europe and Asia) which would involve at least the Western, Balkan, Near Eastern and Far Eastern branches of the Operations Directorate. It would considerably simplify strategic C<sup>2</sup>. In addition the high commands would retain their responsibility for multifront/service coordination.

These probable functions of a modern high command make them an extremely lucrative target in war. As has been demonstrated the Soviets have long recognized a need for an executive coordinator/inspector in the field. Removal of the entity would seriously hamper coordinated multi-front/service execution of strategic operations plans. In a modern complicated, dynamic, nuclear or nonnuclear conflict the loss of this coordination entity would be significant. The loss of the centralized support allocation

function in the field would be similarly significant. It would also create an immediate managerial disparity at the Moscow level by destroying the one-to-one scheme which would complicate planning.

5.3.2.2 The Stavka Representative. Contemporary Soviet writings on strategic C<sup>2</sup> are silent about the applicability of the Stavka representatives to modern conflict. While their positive role in WW II C<sup>2</sup> is acknowledged, no current role for them is proposed. In part this can be explained by the extra-legal nature of the WW II representatives which led to some abuses. More importantly though, if the high commands are to be employed in a future war, the Stavka representatives are superfluous. The high commands would perform the same functions.

There will still probably be a role for the technical Stavka representatives. These representatives, high ranking specialists in fields such as communications or logistics, may be used as trouble shooters to correct critical technical problems at the fronts and armies. Similarly, service representatives from the Navy, LRA, PVO or SRF could be used to support the high command or front staffs in especially critical operations. Thus, while "command" type Stavka representatives such as Zhukov may well now be history, a role for technical adviser/assistants probably persists.

#### 5.4 DETECTION OF THE HIGH COMMAND

This section addresses the detection and localization of the high command in a modern conflict. Although the Soviets may not create such a command, the high command if formed would be a lucrative target. Two communications signatures, based on Soviet WW II experience, are proposed which would indicate the presence of a high command. Although communications media and netting are unlikely to be exactly duplicative of WW II practices, the high command's C<sup>2</sup> responsibilities would place the same operational requirements on communications.

The high command, as a strategic C<sup>2</sup> entity, will be a terminal node in the General Staff C<sup>2</sup> structure within a particular TVD or strategic sector. This alone will not differentiate the high command from a front command. However, the high command is the only deployed echelon within a TVD or strategic sector that also communicates with all the fronts. A combination of General Staff communications plus direct communications to the fronts will be unique to high command.

The second pattern inherent to the high command derives from its mission of "commanding the unified operations of ground forces, air forces and naval forces." The high command is the only deployed echelon which would have communications to all major air and naval forces within a TVD or strategic sector. In contrast, fronts would only communicate with the air or naval units allocated for front support. The number and diversity of such non-ground force communications may be detectable.

Both of these communications patterns must exist if the high command is employed. Combined, and if detectable, these patterns are unique signatures to the existance of a high command. Whether the US has the capabilities to detect and exploit these signatures is beyond the purview of this study.

##### 5.5 CONCLUSION.

The widely held view of Soviet strategic C<sup>2</sup> as being devoid of intermediary entities between Moscow and the fronts is an over simplification. Throughout World War II, a necessity existed for such entities at the critical sectors of the Soviet/German front. They provided a mechanism for coordination, error correction and execution control. Two such entities were used during WW II--the high commands and the Stavka representatives.

The high command was a "theater command" echelon responsible for strategic C<sup>2</sup> of forces deployed within a strategic sector or

theater of operations. It was not a strategic planning echelon. Rather it was responsible for the multifront coordination and execution of Stavka/GS planned strategic operations. With all forces within its AO subordinated to it, the high command could control and allocate these assets to maximize their effect in multi-front strategic operations.

The Stavka representative was an extra-legal institution employed primarily to effect multifront operational coordination. Additionally, the representative was responsible for insuring proper front preparation for and execution of Stavka/GS planned operations. The representative had no formal command authority.

Current Soviet literature indicates that of these two entities the high command is the preferred. If established it will probably perform the same functions as the high commands of WW II. Additionally, it will likely have significant force allocation responsibilities. In particular, SRF and LRA support will likely be allocated to support front operations by the high command.

Should the high command be reestablished in any future war, the destruction of the entity would have a significant detrimental effect. Both the functions of executive inspector of front preparation and coordinator of multifront and service operations are particularly critical to the intricate phased nature of Soviet operations. The loss of this capability in the field will seriously complicate the tasks of the Moscow-level planners and controllers. There is no evidence that the current operations planners at the General Staff are any more capable of effectively performing these functions from Moscow than their WW II predecessors.

## SECTION 5

### NOTES

1. V. P. Morozov, "Some Questions on the Organization of Strategic Leadership in the Great Patriotic War," ISTORIYA SSR, No. 3 (May-Jun. 1975), trans. JPRS, in TRANSLATIONS ON USSR MILITARY AFFAIRS, [here after TUMA], No. 1164 (21 Jul. 1975), p. 39.
2. Vasily [P.] Morozov, "The Need of a More Detailed History of the Battle of the Kursk," THE BATTLE OF KURSK, ed. Ivan Parotkin, et al., p. 326.
3. V. D. Sokolovskiy, SOVIET MILITARY STRATEGY, 3rd ed., p. 361.
4. M. P. Skirdo, THE PEOPLE, THE ARMY, THE COMMANDER, p. 109.
5. Ibid., p. 117.
6. See for example Morozov, "Strategic Leadership in the Great Patriotic War," *passim*. V. G. Kulikov, "The Brain of the Army," PRAVDA, 13 November 1974, trans. USAF, in SELECTED SOVIET MILITARY WRITINGS 1970-1975, p. 188, wrote: "The unity of the political and military leadership provided by the Leninist Party and strengthened by effective organizational forms was one of the important factors in securing our [WW II] victory."
7. Sokolovskiy, p. 362.
8. Skirdo, p. 118.
9. John Erickson, "The Northern Theater: Soviet Capabilities and Concepts," STRATEGIC REVIEW, 4, No. 3 (1976), p. 68.
10. V. Kulikov, "Strategic Leadership of the Armed Forces," VOENNO-ISTORICHESKIJ ZHURNAL, No. 6 (1975), trans. JPRS, in TUMA, No. 1160 (8 Jul. 1975), p. 42.
11. Kulikov, "Strategic Leadership," p. 45.
12. Ibid.
13. Skirdo, p. 118.
14. Kulikov, "Strategic Leadership," p. 45.
15. "Glavonokomanduyuschij," SOVETSKAYA VOENNAYA EHNTSIKLOPEDIYA (SOVIET MILITARY ENCYCLOPEDIA), II, p. 564.

APPENDIX A  
DESCRIPTION OF A THEATER OF MILITARY OPERATIONS

A.1 INTRODUCTION.

The following extract is taken from Marshal Grechko's "Battle for the Caucasus", pp. 14-18. It further illustrates the criteria for a TVD discussed in Chapter 2.

A.2 EXTRACT DESCRIBING THE CAUCASUS TVD.

"Owing to a diversity of natural and climatic conditions, the Caucasus is a specific theatre of military operations. The main factors determining the nature of hostilities there are the relief, climate and the presence of seas.

"The Caucasus is predominately a mountainous region. The Main Caucasian Range which forms the backbone of the entire mountain system extends for 1,200-1,300 kilometres from the Apsheron Peninsula to the mouth of the Kuban River and has a width of from 160 to 180 kilometres. Structurally, the Main Caucasian Range has three sections: the Eastern Caucasus stretching for 400-500 kilometres from Apsheron to Mount Kazbek; the Central Caucasus extending for approximately 150-200 kilometres from Mount Kazbek to Mount Elbrus, and the Western Caucasus.

"The Central Caucasus with peaks ranging from 3,500 to 5,000 metres in height is the most elevated part of the Main Caucasian Range. The summits of Kazbek, Adai-Khokh, Ailama, Shkhara, Elbrus and other mountains are covered with eternal snow. The mountains of the Western Caucasus, from Mount Fishta to the town of Anapa gradually diminish in height. In this sector the highest is Mount Shessi (1,838 metres), while the average height of the mountains is not over 1,000 metres. The Western Caucasus is less difficult for military operations than the eastern and central sectors.

"From the foothills up to an altitude of 1,500-1,800 metres the Main Caucasian Range is overgrown with thick leaf-bearing forests. During the war they provided a natural screen concealing the disposition of the troops, but at the same time handicapped their actions. The higher summits are naked rock.

"The Main Caucasian Range divides the region into the North Caucasus and Transcaucasia. The North Caucasus is a steppe plain which gradually rises in the upper reaches of the Kuban and the Kuma rivers to form the Stavropol Heights beyond which rises the mountain system of Cis-Caucasia. The steppe part of the North Caucasus includes the steppe on the left bank of the Don and the Kuban-Azov and the Caspian plains. South of Divnoye the Stavropol Elevation, which is broad plateau, divides the steppe part of the North Caucasus into the Kuban area and the Nogai steppe. The average heights of the Stavropol Elevation range from 350 to 600 metres above sea level.

"Cis-Caucasia, or the foothills of the Main Caucasian Range, is a system of mountain ranges and summits. Gradually rising higher and higher to the south they form the slopes of the Main Caucasian Range. The whole of the North Caucasus is cut by numerous rivers of the Kuban and the Terek basins, deep valleys, depressions and gorges. The main sector of the steppe part of the North Caucasus presents no obstacles to the employment of all arms of the service. The mountain valleys leading to the passes in the Main Caucasian Range are convenient enough for the employment of large military formations.

"To complete the characterization of the Caucasus as a theatre of military operations a few words should be said about its roads, aerodromes and communications facilities.

"The only railways connecting the North Caucasus with Transcaucasia pass along the Black Sea coast via Tuapse to Batumi

in the west, and in the east, along the Caspian shore from Makhachkala to Baku. It should be noted, however, that the Astrakhan-Kizlyar and the Adler-Sukhumi railways built in 1942 and 1943, respectively, did much to improve the Caucasian transport system and communications between Transcaucasia and the North Caucasus.

"The North Caucasus and Transcaucasia are also connected by highways and dirt roads over the mountain passes. Before the war there were insufficient earth roads both on the plains and in the mountains. There were almost no motor highways in the steppe region while the available earth roads and country tracks were impassable in winter and during spring and summer rains, a circumstance which extremely hampered troop movements.

"In the east, following the coast of the Caspian Sea, runs the Makhachkala-Derbent-Baku highway which is suitable for the movement of all types of forces and transport vehicles; along the Black Sea coast in the western part of the Main Caucasian Range there is the Novorossiisk-Sukhumi highway.

"From north to south the high-altitude part of the range is cut by three well-known highways.

"The Georgian Military Highway which runs from Orjonikidze to Tbilisi via the Krestovy Pass was usually closed in winter owing to snow drifts and avalanches, but it was kept open to traffic during the winter hostilities.

"The Ossetian Military Highway runs through the Mamison Pass to link Alagir and Kutaisi.

"The Sukhumi Military Highway passed through the mountain resort town of Teberda and the Klukhori Pass; it connects Cherkessk (Karachai-Cherkess Autonomous Region) in the North Caucasus with Sukhumi, capital of the Abkhazian Autonomous Republic on the Black Sea coast. From the village of Azhary on the southern slope of the Caucasian Range the road descends first along the Kodori Gorge and

then turns west to Sukhumi. In winter numerous snow drifts make the road impassable almost along its entire length.

"The hydrography of the Caucasus is as distinct and complicated as its relief. Numerous small mountain rivers have their headwaters in the glaciers of the Main Caucasian Range. Among the bigger rivers which could have been serious barriers to the German troops were the Don, whose lower reaches from Verkhne-Kurmoyarskaya to the Sea of Azov covered the northern approaches to the Caucasus, the Kuban and the Terek with its tributaries the Sunzha, Ardon, Urukha and Malka.

"Another factor which seriously influenced troop operations were the lakes and flood-lands in the deltas of the Don, Kuban and Terek and along the Kuma-Manych depression. In eastern Cis-Caucasia a large area is covered by the Kuma marshes which extend from the village of Urozhainoye to the Caspian Sea.

"In western Cis-Caucasia the very large Kuban marshlands are interspersed with numerous lakes. There is a group of salt lakes in the Kuma-Manych depression of which the biggest, Manych-Gudilo, extends for almost 120 kilometres from west to east. Beside the lakes and the marshlands the shores of the Azov and Caspian seas abound in lagoons, the largest of which (Yeisk, Beisug and Kirpili lagoons) are on the coast of the Sea of Azov.

"The seas also play a large part in determining the nature of the Caucasian theatre of military operations.

"The Caspian Sea, the great part of which lies in the territory of the USSR, joins the Caucasus with the Soviet Central Asian republics and via the Volga with the central regions of the country. In the waters of the Caspian wash the shores of Iran.

"Of much greater strategical importance is the Black Sea. In this time Karl Marx wrote about the tremendous significance of

the Black Sea in promoting economic, political and cultural ties between Europe and the Middle East.

"In the pre-war years, because of a shortage of mountain aerodromes and uncertain weather conditions there were very few airlines over the mountainous part of the Caucasus.

"Meteorological conditions greatly restricted air operations during the battle for the Caucasus. There were times when Luftwaffe, operating from airfields in the North Caucasus, bombed our troops, while Soviet fighter planes were forced to limit their operations because of the thick fogs that hung over their bases.

"As a result of economic backwardness and national disunity fostered by Russian tsarism over many decades, there were almost no permanent communications lines between different parts of the Caucasus before the Revolution. The construction of telephone and telegraph communications connecting the Transcaucasian republics and the North Caucasus commenced only after the establishment of Soviet rule. And when the Second World War broke out the communications network was still underdeveloped. This was another aspect of the Caucasus as a theatre of military operations.

"The state of the land, sea and air communications in the Caucasus and its relief, hydrography and climatic features determined the chief operational directions along which the Germans were liable to launch their offensive. Strategically, the most important directions traversing the Caucasus from northwest to southeast were the East and West Caucasian directions. The East Caucasian direction had as its axis the railway and highway running from Prokhladny to Baku via Gudermes, Makhachkala and Derbent. From the axis of the West Caucasian direction were the highway and railway which following the Black Sea shore and passed through Tuapse and Sukhumi. Both directions had a considerable zone-of-action capability and were suitable for operations by army and front groups.

"Finally, in order to fully appreciate the strategic significance of the Caucasus it is necessary to bear in mind its proximity to Iran and Turkey. In the Second World War all key economic regions in the south, including Caucasian oilfields, the Donets Coal Basin, the Krivoi Rog-Nikopol region, and the extremely important Soviet Black Sea and Caspian ports could be bombed by planes based in Turkey.

"Thus, the Caucasus plays a very important economic and military-strategic role in the life of the Soviet people and in strengthening the defensive capacity of the USSR. Its great significance lies in its vast natural wealth, powerful industrial base, and the cohesion of all its peoples into a close-knit family which is building communist society and showing the world how to achieve social and national emancipation. Moreover, the Caucasus is situated in an important region of the world traversed by trade and strategic routes linking the countries of Europe, Asia and the Middle East."

APPENDIX B  
BIBLIOGRAPHY

Andreev, V. "The Subdivision and Classification of Theaters of Military Operation." VOENNAYA MYSL', No. 11 (1964). Trans. CIA, FDD 924 (30 Jun. 1965), pp. 15-20.

Biryuzov, S.S. "The Lessons of the Beginning Period of the Great Patriotic War." VOENNAYA MYSL', No. 8 (1964). Trans. CIA, FDD 904 (23 Apr. 1965), pp. 1-32.

Bronevskiy, S. "The Factors of Space and Time in Military Operations." VOENNAYA MYSL', No. 7 (1963). Trans. CIA, FDD 956 (30 Mar 1966), pp. 35-47.

CHASTOTNYJ RUSSKO-ANGLIJSKIJ VOENNYJ SLOVAR'. Ed. L. L. Nelyubin. Moscow: Voyenizdat, 1977.

Danilov, V. "From the RKKA Staff to the General Staff of the Workers' and Peasants' Red Army (1924-1935)." VOENNO-ISTORICHESKIJ ZHURNAL, No. 8 (1978). Trans. JPRS. In TRANS LATIONS ON USSR MILITARY AFFAIRS, No. 1392 (2 Nov. 1978), pp. 14-22.

DICTIONARY OF BASIC MILITARY TERMS. Moscow: 1965. Trans. DGIS, Secretary of State Department, Canada. Washington, D.C.: U.S. Air Force, 1977.

Dzhelaukhov, Kh. "Combating Strategic Reserves in a Threater of Military Operations." VOENNAYA MYSL', No. 11 (1964). Trans. CIA, FDD 924 (30 Jun. 1965), pp. 2-14.

Erickson, John. "The Northern Theater: Soviet Capabilities and Concepts." STRATEGIC REVIEW, IV, No. 3 (1976), pp. 67-82.

----- THE ROAD TO STALINGRAD. New York: Harper and Row, 1975.

Garthoff, Raymond L. SOVIET STRATEGY IN THE NUCLEAR AGE. New York: Praeger, 1958.

Grechko, Andrei. BATTLE FOR THE CAUCASUS. Trans David Fidlon. Moscow: Progress, 1971.

ISTORIYA VTOROJ MIROVOY VOJNY 1939-1945. Vol IV. Ed. A. A. Grechko, et al. Moscow: Voyenizdat, 1975. Trans. and Ed. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1201 (24 Nov. 1975), pp. 1-68.

ISTORIYA VTOROJ MIROVOY VOJNY 1939-1945. Vol. VII. Ed. A. A. Grechko, et al. Moscow: Voyenizdat, 1976.

Joint Chiefs of Staff. DICTIONARY OF MILITARY AND ASSOCIATED TERMS. JCS Publication No. 1, 3 September 1974.

Kozlov, S. N. THE OFFICER'S HANDBOOK. Trans. DGIS, Secretary of State Department, Canada. Washington, D.C.: U.S. Air Force, 1977.

Krupchenko, I. "Some Features of Soviet Military Art." VOYENNO-ISTORICHESKIY ZHURNAL, No. 8 (1975). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1183 (26 Sep. 1975), pp. 75-87.

Kulikov, I. "OFITSERY-PREDSTAVITEL' GENERAL'NOGO SHTABA V OBORONITEL'-NOM SRAZHENII POD KURSKOM." VOYENNO-ISTORICHESKIY ZHURNAL, No. 8 (1976), pp. 79-84.

Kulikov, V. G. "The Brain of the Army." PRAVDA, 13 Nov. 1974. Trans. USAF. In SELECTED SOVIET MILITARY WRITINGS 1970-1975. Washington, D.C.: U.S. Air Force, 1977.

----- "Strategic Leadership of the Armed Forces." VOYENNO-ISTORICHESKIY ZHURNAL, No. 6 (1975). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1160 (8 Jul. 1975), pp. 40-55.

Maslov, V. "Combat Operations of the Pacific Fleet." VOENNO-ISTORICHESKIY ZHURNAL No. 8 (1975) Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1189 (14 Oct. 1975), pp. 61-63.

Medvedev, Roy A. LET HISTORY JUDGE. Trans. Colleen Taylor. Ed. David Joravsky and George Haupt. New York: Random House-Viking, 1973.

Mikhaylovskiy, G., and I. Vydrov. "The Great Patriotic War and the Postwar Period: Supreme Organs for Conduct of War." VOENNO-ISTORICHESKIY ZHURNAL, No. 4 (1978). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1360 (3 Jul. 1978), pp. 40-55.

Morozov, Vasily [P]. "The Need of a More Detailed History of the Battle of Kursk." In THE BATTLE OF KURSK. Trans. G.P. Ivanov-Mumjiev. Ed. Ivan Parotkin, et al. Moscow: Progress, 1974, pp. 326-333.

----- "Some Questions on the Organization of Strategic Leadership in the Great Patriotic War." ISTORIYA SSR, No. 3 (May-Jun 1975). Trans. JPRS. In TRANSLATIONS OF USSR MILITARY AFFAIRS, No. 1164 (21 Jul. 1975). pp. 31-57.

Palmer, R. R. and Joel Colton. A HISTORY OF THE MODERN WORLD. 3rd ed. New York: Adolf Knopf, n.d.

Peresypkin, I.T. COMMUNICATIONS IN THE GREAT PATRIOTIC WAR. Moscow: Izdatel'stvo Nauka, 1973. Trans. JPRS, 64919 (4 Jun. 1975).

----- "Communications in the Manchurian Operation" VOENNO-ISTORICHESKIJ ZHURNAL, No. 10 (1975). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1203 (2 Dec. 1975), pp. 37-44.

Pokrovskiy, A. "Memoirs: On the Southwest Sector." VOENNO-ISTORICHESIY ZHURNAL, No. 4 (1978). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1360 (3 Jul. 1978), pp. 39-51.

Popel', N.N., V.S. Savel'ev, and P. V. Shemanskiy. TROOP CONTROL DURING THE GREAT PATRIOTIC WAR. Moscow: Voenizdat, 1974. Trans. JPRS. 64920 (4 Jun. 1975).

Portugal'skiy R., and N. Fomin. "Certain Questions of Improving the Structure of Command and Control Bodies of the Front and Army." VOENNO-ISTORICHESKJ ZHURNAL, No. 8 (1978). Trans JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1391 (30 October 1978), pp. 135-145.

Riasanovsky, Nicholas V. A HISTORY OF RUSSIA 3rd. ed. New York: Oxford Univ. Press, 1977.

Samoylenko, V. "There is No Last Day in Training." KRSNAYA ZVEZDA, 11 Apr. 1975. Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1146 (30 May 1975), pp. 13-16.

Shtemenko, S.H. GENERAL'NYJ SHTAB V GODY VOJNY KNIGA VTORIYA. Moscow: Voenizdat, 1973. Trans. JPRS, 65733-1 and 65733-2 (22 Sept. 1975).

----- THE SOVIET GENERAL STAFF AT WAR: 1941-1945. Trans.  
Robert Daglish. Moscow: Progress, 1975.

Silant'ev, A. "UPRAVLENIE AVIATSIEJ V NASTUPATEL'NYKH DEJSTVIYAKH VOJSK." VOENNO-ISTORICHESKIJ ZHURNAL, No. 4 (1976), pp. 29-38.

Skirdo, M. P. THE PEOPLE, THE ARMY, THE COMMANDER. Trans. DGIS, Secretary of State Department, Canada. Washington: USAF, n.d.

SLOVAR' RUSSKOGO YASYKA. Ed. S.I. Ozhegov. Moscow: Izdatel'stvo "Russkij Yaz," 1977.

Sokolovskiy, V. D. SOVIET MILITARY STRATEGY. 3rd ed. Trans. and ed. Harriet Fast Scott. New York: Crane, Russak and Co., 1975.

SOVETSKAYA VOENNAЯ EHNTSIKLOPEDIYA. II. Moscow: Voenizdat, 1977.

Treadgold, Donald W. TWENTIETH CENTURY RUSSIA. 4th ed. Chicago: Rand McNally, 1976.

Vasilevskiy, Aleksandr M. "The Campaign in the Far East." VOENNO-ISTORICHESKIJ ZHURNAL, No. 10 (1975). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1203 (2 Dec. 1975), pp. 21-36.

----- "The Command Post of the War." KOMSOMOLSKAYA PRAVDA, 30 Apr 1975. Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1143 (16 May 1975), pp. 29-39.

----- "During Those Grim Years." VOENNO-ISTORICHESKIJ ZHURNAL, No. 2 (1978). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1344 (7 Apr 1978), pp. 75-84.

----- "A Life Dedicated to Serving the Motherland." NARODNAYA ARMIYA, 30 Sept. 1975. Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1193 (28 Oct. 1975) pp. 10-15.

----- "Rout of the Kwantung Army." VOENNO-ISTORICHESKIJ ZHURNAL, No. 8 (1975). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1189 (14 Oct. 1975), pp. 44-60.

----- "Victory in the Far East." VOENNO-ISTORICHESKIJ ZHURNAL, No. 8-9 (1970). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 654 (4 Nov. 1970), pp. 31-54.

Vyrodov, I. Strategic and Operational Art: on the Leadership of Military Operations of Strategic Troop Groupings in World War II" VOENNO-ISTORICHESKIJ ZHURNAL, No. 4 (1979). Trans. JPRS. In TRANSLATIONS ON USSR MILITARY AFFAIRS, No. 1446 (13 Jun. 1979), pp. 19-25.

Werth, Alexander. RUSSIA AT WAR: 1941-1945. New York: Discuss-Avon, 1970.

Zhilin, P., and E. Egorov. "Book on the History of Military Art." VOYENNAYA MYSL', No. 10 (1966). Trans. CIA, FPIR 0504/67 (29 May 1967), pp. 68-74.

Zhukov, Georgi [K]. "In the Kursk Bulge." In THE BATTLE OF KURSK. Trans. G.P. Ivanov-Mumjiev. Ed Ivan Parotkin. Moscow: Progress, 1974, pp. 33-58.

----- THE MEMOIRS OF MARSHAL ZHUKOV. Trans. Novosti. New York: Dalacorte, 1971.

DISTRIBUTION LIST

DEPARTMENT OF DEFENSE

U.S. Documents Officer, AFSOUTH  
ATTN: U.S. Documents Officer

Armed Forces Staff College  
ATTN: Reference & Technical Services Branch  
ATTN: Dept. of Command Control & Communications

Assistant Secretary of Defense  
Comm., Cmd., Cont. & Intell.  
ATTN: Strat. & Theater C&C System  
ATTN: Surveillance & Warning Systems  
ATTN: Assistant for NATO C3

Assistant Secretary of Defense  
Program Analysis & Evaluation  
ATTN: General Purpose Programs

Assistant to the Secretary of Defense  
Atomic Energy  
ATTN: B. Adams  
ATTN: Executive Assistant

Command & Control Technical Center  
ATTN: C-330  
ATTN: C-610  
ATTN: C-300  
ATTN: C-650

Commander-in-Chief, U.S. European Command  
ATTN: J-5NPG  
ATTN: J-6  
ATTN: J-2-FTD  
ATTN: J-2  
ATTN: J-3  
ATTN: ECJ-6-0J  
ATTN: ECJ6-OP

Commander-in-Chief, Pacific  
ATTN: J-2  
ATTN: J-54  
ATTN: J-3  
ATTN: J-6

Defense Advanced Rsch. Proj. Agency  
ATTN: TIO

Defense Communications Agency  
ATTN: Code 530  
ATTN: Code 520  
ATTN: Code 205  
ATTN: Code 410  
ATTN: Code 101B  
ATTN: Code 510

Defense Communications Engineer Center  
ATTN: Code R400  
ATTN: Code R123  
ATTN: Code R720

Defense Intelligence Agency  
ATTN: RDS-3A  
ATTN: DT-4B  
6 cy ATTN: DT-1B

DEPARTMENT OF DEFENSE (Continued)

Defense Nuclear Agency  
ATTN: STRA  
ATTN: DDST  
ATTN: OASO  
ATTN: STNA  
ATTN: STSS  
ATTN: STSP  
ATTN: STVL  
ATTN: VLIS  
4 cy ATTN: TITL

Defense Technical Information Center  
12 cy ATTN: DD

Field Command  
Defense Nuclear Agency  
ATTN: FCP-FCPRK  
ATTN: FCPR

Field Command  
Defense Nuclear Agency  
Livermore Division  
ATTN: FCPRL

Interservice Nuclear Weapons School  
ATTN: TTV

Joint Chiefs of Staff  
ATTN: SAGA  
ATTN: J-3  
ATTN: J-3, NMCC  
ATTN: J-3, Nuclear Contingency Branch  
ATTN: J-3, WWMCCS, Council Support Office  
ATTN: J-5, Nuclear Division  
ATTN: J-3, WWMCCS, Evaluation Office

Joint Strat. Tgt. Planning Staff  
ATTN: JL TW-2  
ATTN: JSAS  
ATTN: JPST  
ATTN: NRI-STINFO, Library  
2 cy ATTN: JL

Joint Tactical Communications Ofc.  
ATTN: TT-E-SS

National Communications System  
ATTN: NCS-TS

National Security Agency  
ATTN: R-52, O. Van Gunten  
ATTN: TDL

Net Assessment  
Office of the Secretary of Defense  
ATTN: Military Assistants

U.S. Forces, Korea  
ATTN: DJ-AM-SM  
ATTN: CJ-P-G

U.S. National Military Representative, SHAPE  
ATTN: U.S. Documents Officer

DEPARTMENT OF DEFENSE (Continued)

Undersecretary of Def. for Rsch. & Engrg.  
ATTN: Tactical Warfare Programs  
ATTN: Research & Adv. Tech.  
ATTN: Strategic & Space Systems (OS)

WWMCCS System Engineering Org.  
ATTN: WWMCCS/SEE

DEPARTMENT OF THE ARMY

Asst. Chief of Staff for Intelligence  
Department of the Army  
ATTN: DAMI-FI

Atmospheric Sciences Laboratory  
U.S. Army Electronics R&D Command  
ATTN: DELAS-AS

Deputy Chief of Staff for Ops. & Plans  
Department of the Army  
ATTN: DAMO-ROC  
ATTN: DAMO-ODW  
ATTN: DAMO-SSP  
ATTN: DAMO-ZD

Deputy Chief of Staff for Rsch. Dev. & Acq.  
Department of the Army  
ATTN: Advisor for RDA Analysis, M. Gale  
ATTN: DAMA-CSS-N

Harry Diamond Laboratories  
Department of the Army  
ATTN: DELHD-N-RBA  
ATTN: DELHD-N-CO  
ATTN: DELHD-N-P  
ATTN: DELHD-N-RBH  
ATTN: DELHD-I-TL  
2 cy ATTN: DELHD-N-EM

Multi Service Communications Systems  
Department of the Army  
ATTN: DRCPM-MSCS-APB, M. Francis

U.S. Army Ballistic Research Labs.  
ATTN: DRDAR-VL  
ATTN: TBL  
ATTN: CAL

U.S. Army Comb. Arms Combat Dev. Acty.  
ATTN: ATCA-CO  
ATTN: ATCA-CFT  
ATTN: ATCA-CA

U.S. Army Comd. & General Staff College  
ATTN: ATSW-TA-D

U.S. Army Communications Sys. Agency  
ATTN: CCM-AD-LB

U.S. Army Concepts Analysis Agency  
ATTN: Code 605/606

U.S. Army Electronics Rsch. & Dev. Command  
ATTN: DRCPM-TDS-SD  
ATTN: DRCPM-ATC

U.S. Army Missile R&D Command  
ATTN: DRSMI-YDR

DEPARTMENT OF THE ARMY (Continued)

Commander-in-Chief  
U.S. Army Europe and Seventh Army  
ATTN: DCSOPS-AEAGB  
ATTN: DCSOPS-AEAGD-MM  
ATTN: DCSOPS-AEAGC-DSW  
ATTN: ODCSE-E-AEAGE  
ATTN: DCSOPS-AEAGC-O

U.S. Army Materiel Sys. Analysis Activity  
ATTN: DRXSY-DS  
ATTN: DRXSY-S

U.S. Army Nuclear & Chemical Agency  
ATTN: Library  
ATTN: Library for MONA-WED  
ATTN: Library for MONA-SAL

U.S. Army Satellite Comm. Agency  
ATTN: TACSAT Office  
ATTN: DRCPM-SC-11

U.S. Army TRADOC Systems Analysis Activity  
ATTN: ATAA-TAC

U.S. Army Training and Doctrine Comd.  
ATTN: ATCD-Z  
ATTN: Technical Library

U.S. Army War College  
ATTN: Library

V Corps  
Department of the Army  
ATTN: AETVGB  
ATTN: AETVGC  
ATTN: AETVCE

VII Corps  
Department of the Army  
ATTN: AETSGB-0  
ATTN: AETSCE  
ATTN: AETSGC

DEPARTMENT OF THE NAVY

Command & Control Programs  
Department of the Navy  
ATTN: OP 941

Naval Ocean Systems Center  
ATTN: Research Library

Naval Surface Weapons Center  
ATTN: Code F31

Office of the Chief of Naval Operations  
ATTN: OP 604 E/F  
ATTN: OP 96  
ATTN: OP 94

Commander-in-Chief, U.S. Atlantic Fleet  
ATTN: Code J54  
ATTN: Code J-611A

Commander-in-Chief, U.S. Naval Forces, Europe  
ATTN: N3262, Nuclear Surety Officer

DEPARTMENT OF THE AIR FORCE

Air Force Geophysics Laboratory  
ATTN: SULL

Air Force Weapons Laboratory  
Air Force Systems Command  
ATTN: SUL  
ATTN: DYC

Assistant Chief of Staff  
Intelligence  
Department of the Air Force  
ATTN: INAK

Assistant Chief of Staff  
Studies & Analyses  
Department of the Air Force  
ATTN: AF/SASC  
ATTN: AF/SAGF

Deputy Chief of Staff  
Operations Plans and Readiness  
Department of the Air Force  
ATTN: AFXOK  
ATTN: AFXOXM

Deputy Chief of Staff  
Research, Development, & Acq.  
Department of the Air Force  
ATTN: AFRDQSM

Electronic Systems Division  
Department of the Air Force  
ATTN: XRC

Foreign Technology Division  
Air Force Systems Command  
ATTN: NIIS, Library

Headquarters Space Division  
Air Force Systems Command  
ATTN: SKA

Headquarters Space Division  
Air Force Systems Command  
ATTN: YCPG

Strategic Air Command  
Department of the Air Force  
ATTN: XPS  
ATTN: DCXT  
ATTN: NRT

Tactical Air Command  
Department of the Air Force  
ATTN: DRA

Commander-in-Chief, U.S. Air Forces in Europe  
ATTN: DOC  
ATTN: XPXX

Ballistic Missile Office  
Department of the Air Force  
ATTN: MRBM

OTHER GOVERNMENT AGENCY

Central Intelligence Agency  
ATTN: OSI/LSD, R. Hart  
ATTN: OSR/SF, R. Virgo  
ATTN: OSR/SEC

DEPARTMENT OF DEFENSE CONTRACTORS

BDM Corp.  
ATTN: Corporate Library  
ATTN: W. Sweeney  
ATTN: G. Baird

Boeing Co.  
ATTN: R. Scheppe

66th MI Group  
ATTN: RDA/Munich

Computer Sciences Corp.  
ATTN: H. Blank  
ATTN: Library

ESL, Inc.  
ATTN: Library  
ATTN: J. Marshall

General Electric Co.—TEMPO  
ATTN: DASIAC

General Electric Co.—TEMPO  
ATTN: DASIAC

GTE Sylvania, Inc.  
ATTN: M. Cross

Institute for Defense Analyses  
ATTN: D. Signori  
ATTN: Classified Library

Kaman Sciences Corp.  
ATTN: D. Choate

R & D Associates  
ATTN: Technical Information Center  
ATTN: R. Schaefer  
ATTN: R. Poil  
ATTN: R. Latter  
ATTN: C. MacDonald

R & D Associates  
ATTN: A. Cicolani  
ATTN: L. Delaney

RCA Corp.  
ATTN: E. Van Keuren

SRI International  
ATTN: W. Jaye  
ATTN: C. Shoens

TRW Defense & Space Sys. Group  
ATTN: W. Rowan

TRW Defense & Space Sys. Group  
ATTN: J. Dyche

